

Field Meeting to the gold mine at Gwynfynydd, Merioneth, Gwynedd

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WATERS, L. & ING, C. (1981). Field Meeting to the gold mine at Gwynfynydd, Merioneth, Gwynedd. *Proceedings of the Shropshire Geological Society*, 1, 20. Gold in the valley of the Mawddach river, north of Dolgellau. The present mining project at Gwynfynydd is being carried out as a speculative venture.

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To a cavern in a canyon
Excavations for a mine
Went Geolly Trippers, Forty Niners
And a bunch from Ellerdine

Up the valley through a monsoon
Just to see a Klondyke dream
In a stope, gold you hope
Or was it just a pyrite gleam?

Is there really gold in Wales? Chapter 1 of George Hall's excellent book "The Gold Mines of Merioneth" sums up the attitude held by many concerning the existence of a substance that one normally associates with Francis Drake, Tutankhamon, Jo'burg and California. The Society has been dogged by a Vice-Chairman who takes bad weather with him everywhere. Even so, an excellent day was had in the mountains of Wales, in the valley of the Mawddach river, north of Dolgellau, near the Rhaiadr Mawddach Waterfall.

Five years before the California gold rush in 1849 the existence of gold in this part of Wales was acknowledged. In the years that followed, over £9M worth of gold was extracted, particularly between 1887 and 1914. The gold is found throughout a belt of country running from Barmouth north eastwards to north of Dolgellau. The outcrop of gold-bearing rock follows the southern edge of the Harlech dome. The gold is found in lodes or veins associated with quartz, calcite, chalcopryrite, pyrite, galena and blende. The veins follow faults or major joint planes in the rocks, and the majority of the gold has been found in the three hundred foot thick pyritic Clogau Shales of Cambrian age.

For many of the people who were on the trip, it was the first time they had been down a mine of any type. It was a very exciting experience for most of us (and a very terrifying one for a few!).

All saw the extensive underground excavations, probably dug in the crazed expectation that early retirement and Utopia were just round the corner. The mines were dark, cold and rather inviting, with little light or drainage. The Society jokers with cold clammy hands made it the more horrific!

There are very extensive tunnels throughout the mountain, with excavations following the veins, often at a 45° slope. Those excavations are called "stopes". They are usually worked up the dip, and some of them are so large that it is a marvel that the overlying rock stays in place. Most of the stopes have only produced a few ounces of gold per ton of rock, whereas small patches have produced hundreds of ounces per ton. The uneven distribution of the gold has tended to make the mining very speculative, and the luck of one good discovery has run out quickly, leaving the mine with huge excavations for little return.

The present mining project at Gwynfynydd is being carried out by two Cornish miners (ex-Wheel and Ffestiniog Railway, to mention but two of their other projects) as a speculative venture for an unnamed third party, in the belief that they have solved the 3-D brain teaser that locating the gold-rich veins has become. This will seem a marvel of mining technology, especially to those who were perplexed by the perspex model in the mine buildings. Certainly the modern machinery so deafeningly demonstrated will make the task easier.

Although most of us do not envy the working conditions, I am sure we all envied the spirit of adventure and the promise of fortune.

Our thanks to George Hall and his mining friends, to Mr. T.E. Jones of Vaggs Coaches for such patient driver, and Mr. B. Faulty of the nearby Hotel for tea and scones. Last, but not least, Lavinia Waters and Chris Ing for organising the trip.