

## **U3A GEOLOGY GROUP REPORT**

**Field Trip in Upper Teesdale on April 22<sup>nd</sup>**

**Bob Tuddenham**

In April we had our first field trip of the summer very ably led by Trevor Morse.

Given the indifferent weather, we limited the trip to Bow Lee Beck in Upper Teesdale. We walked from the car park up to Gibson's Cave and there was certainly plenty of interesting geology to look at.

Nine of us met at Bowlees Visitor Centre and over a welcome coffee, Trevor gave out some excellent handouts and explained the essential geology of Teesdale and the surrounding area highlighting particularly the faults associated with the Alston Block (an important granite intrusion). He also talked about the cyclic strata that we see of limestone, mudstone, sandstone and occasionally coal. These are cyclothem that repeat numerous times. Trevor mentioned the more recent developments that relate the bedding planes to climate changes during the Carboniferous.

We then ventured to the Bow Lee Bridge and looked at the Cockleshell Limestone before moving up Bow Lee Beck itself. Trevor demonstrated what a geologist in the field looks for and can interpret from the evidence on the ground. For example, the small waterfalls of more resistant rocks and the presence of small faults. We went into the disused limestone quarry of Scar Limestone and also looked at the adit on the other bank of the beck that had been used to unsuccessfully look for iron ore. We could see ripple marks on the sandstone and a few of us went on up to Gibson's Cave. This impressive feature is the top of the Scar Limestone Cyclothem with the limestones of the succeeding Five Yard Cyclothem forming the lip of the waterfall.

It was a most enjoyable morning led by an expert geologist. Many thanks to Trevor Morse.

Our next meeting is the The Witham on Monday morning May 20<sup>th</sup> at 10 am. All are welcome. Please contact the convenor for the programme and details.

