U3A GEOLOGY GROUP REPORTS

Bob Tuddenham

Meetings on Zoom on Jan 13th and Jan 27th

We have had two excellent well attended one hour meetings on Zoom in January with two talks by Les Knight and one by Trevor Morse. All three talks were about igneous rocks and with particular reference to the north of England and the Whin Sill in our local area.

Les started the New Year with an introduction to basalt, the most common igneous rock. He explained the different types of basalt, their formation and where they arise. He made what was quite complex mineralogy and terminology most accessible with clear graphs and explanations. We were also given a world view of where basaltic rocks arise before we started looking more closely at Whin Sill in the north of England.

Trevor then continued the theme with a short talk entitled 'The Whin Sill continues to keep on giving in Upper Teesdale'. As an expert on the geology of Teesdale, Trevor took us through the geological history of the dale and the importance of the Whin Sill intrusion in shaping the dale's topography and in forming many key features including High and Low Force. Also, as a very hard igneous rock, the Whin Sill is still used for roadstone with an active quarry at Force Garth in Upper Teesdale.

In his second talk, Les Knight explained about the extensive igneous activity and massive intrusions in northern England and the Midland Valley in Scotland at the end of the Carboniferous period. This is some 300 mya and took place over a period of some 70 million years. Historically much of our understanding about igneous rocks was the result of research into the local geology at Edinburgh University in the 19th Century. As well as basalt, the samples contain other rocks and crystals which also tell a story. However, even now, geologists do not fully understand the tectonic processes that took place at that time though there is some evidence that there was a triple junction of plates in Scandinavia which could have been similar to that found today at the south west end of the Red Sea.

EITHER

Our final meeting on Zoom takes place on Monday morning February 24th at 10.30 am. All are welcome. Please contact the convenor for the programme and the Zoom joining details.

OR

We have now completed our Zoom meetings for the winter and our next meeting will be held at The Witham on Monday morning March 24th at 10 am. All are welcome. Please contact the convenor for details and the programme for the meeting.