

Loch Ardinning Field Skills Day

Saturday 15th August 2015

Leader: - Dr. Simon Cuthbert

Participants 7

Report by Roy Bryce

Last year I enjoyed a drive through the North West Highlands Geopark, and stopped off to take a walk round the Knockan Crag Visitor Centre. The display boards there explained that after the completion of several years of hard work in severe conditions, Ben Peach and John Horne had been able to use the results of their careful mapping of the region to convince doubters that the Moine Thrust was a reality. I looked round at the landscape from the Visitor Centre and wondered just how they could have extracted so much information from such rugged and forbidding terrain. I was therefore delighted to get the chance to find out how this was done when the Society offered the chance to undertake a Field Skills Day at Loch Ardinning near Mugdock Country Park.

The day began with an introduction from our leader, Dr. Simon Cuthbert, to the technique of “Exposure Mapping” with a warning that in the locality being examined there was only a small percentage of the underlying rock that was actually outcropping, so it would be necessary to also use “Green Line Mapping” to record our observations to provide a map and accompanying notes that would enable other people to locate and identify the features we were recording. Having explained the laborious procedures that were required by earlier mappers, Simon then gave a demonstration of some smartphone apps which were downloadable free from the internet that not only provided instantaneous strike and slip measurements but also provided a structured project environment for recording notes and photographs.

Following on from the wise words of Ronald Regan – “Don’t just do something – sit there”, we did not all sit down and start creating our maps immediately, but instead took a leisurely tour round the entire area of the locality to try to gain an understanding of the lie of the land and the relationship between the different types of terrain both visible and under the soil. Simon also gave us some valuable tips on understanding how the land that we could see was shaped by the type of rock underneath, certain ground conditions being a consequence of the geology beneath. Armed with our new knowledge, we were then given the task of revisiting the features that had caught our interest on the original tour of the locality and to start adding detail to the unmarked map that Simon had supplied and to record our observations in our notebooks. We also came across an extremely interesting outcrop in the woods that we had not noticed earlier and

Simon showed us how to interpret the evidence in front of our eyes to understand how the formation came into existence.

As four o'clock drew near, we headed back to our cars with the sound of a prize giving ceremony coming from the nearby riding school.

“Thank you all for coming – it’s been a great day”
said the announcer. I couldn’t have agreed more.

N.B. As this was a field skills day involving academic teaching, I have chosen not to mention any specifics of the skills taught. It is also a day of discovery, and since Simon intends to repeat the course with other participants, I have also not ruined their day by identifying any features.



Photo bill Gray

A gravel bar with cross-bedding in the Douglas Muir Quartz-Conglomerate, the basal unit of the Craigmaddie Muir Sandstone. This bar was deposited in a deep (20 -50m) channel of a braided stream flowing rapidly down a gradient of around 3 degrees