

How to make a geological map - of a bit of Northumberland, Britain...and the world

The challenge of a BGS field geologist in producing each of his 1:10,000 scale map sheets of 25 square kilometres of Britain is to use his expertise to interpret whatever evidence there is - outcrops, the shape of the topography, boreholes, river and road exposures, and in the absence of those, soil type and vegetation - and complete his map. The challenge of BGS, as the body responsible for Britain's geology since 1835, is to assemble those map sheets (many thousands), into a consistent national map and make them available to society; in the 21st century that means digitally. The challenge of geology as a science is to recognise that the world and its peoples need the best and most coherent geological data possible to achieve sustainability for our environment and resource demands. Rocks and the opportunities and hazards they present do not respect or stop at political frontiers and so to the best of our ability our maps and science need to be joined up. This talk will describe those three challenges and how successful we have been in achieving them.

Speaker: Ian Jackson.

Ian was born and raised in Carlisle. He has a degree in geology and geography from the University of Newcastle upon Tyne and is a Chartered Geologist and Fellow of the Geological Society. He spent 18 years surveying the geology of parts of the north of England, including Northumberland and Tyneside, for the British Geological Survey. Later he was responsible for national and international programmes that produced the first UK, European and global digital geological maps and made them web accessible. He retired from the position of BGS Operations Director in 2011 and moved to Bardon Mill. Ian hikes in Northumberland, Durham or Cumbria every week and in addition to many scientific maps, articles and reports, he is the author of a recently published best-selling trilogy: Northumberland Rocks, Cumbria Rocks, and soon to be released, Durham Rocks