DAVID CUNNINGHAM GREIG
BSc, MA

David Greig was born on 16th February 1922 in Glasgow. Although the family moved soon afterwards to nearby North Renfrewshire, David was educated at Glasgow High School, where contemporaries recall the ease with which he coped with exams and how he developed a natural fluency in languages, ancient and modern.

With this background David went to Glasgow University where he started an Arts course; although the beginning of the war was due to intervene. At University David joined the recently formed Mountaineering Club, reflecting and perhaps reinforcing his interest in the outdoors.

In due course David was called up to the REME and served in both Europe and East Africa. His fluency in French proved a bonus to his operations and he acted as virtual unit interpreter: later in non-French speaking areas he was also able to converse with the local priest in Latin! David's adjutant was Robert Eden, a future geological colleague, and it is possible that their acquaintance at this time first steered David towards geology.

Whatever the full cause, after being demobbed David returned to University where he decided to switch course to geology, eventually graduating BSc and finishing his MA *en route*. During this period David maintained his interest in the Scottish hills as well as going on the occasional foray to the Alps.

On graduation David joined the Geological Survey in 1951 and, now married to Lanchen, was posted to the South Wales and West Midlands unit working out of the London Office. At that time the Survey was heavily committed to supporting the National Coal Board and for a short time David was involved in the revision of map sheets related to the Midlands coalfields. However by 1953 he had started work on the revision of the 1:50k Church Stretton (166) map sheet, a task which was to last over the next seven years.

This was classical Survey work based on detailed and systematic six-inch to one mile scale mapping, the geologist having to map solid and drift lithologies. David was initially involved with the Lower Old Red Sandstone succession in the south of the sheet and latterly in the older Longmynd inlier. He was primarily concerned with establishing the lithostratigraphy and defining the main structural elements. During this work David was promoted to Senior Geologist as of January 1953 and to Principal Geologist as of January 1958. Following completion of the field survey David was involved, as senior author, in writing the explanatory sheet memoir. Although, for various reasons, the memoir was not published until 1968, at c300 pages it provides a detailed and comprehensive account of the geology of this classical study and teaching area.

David was always anxious to return to Scotland, and in May 1962 he jumped at the chance of a move to Edinburgh where he joined the South Lowland unit. The then head of the unit was Robert Eden who had been David's wartime associate, and although in a different unit, had also worked with David in England. The survey of East Lothian and Berwickshire was just commencing and David, given his experience in the south, started mapping on the Eyemouth (34) sheet. The geology of the sheet is dominated by the Silurian greywacke succession and the sandstone and volcanic rocks of the Siluro-Devonian. The inland area is largely covered by drift deposits and the key to the solid geology lies in the detailed examination of the classical coastal sections. Although not high ground, the sea cliffs are steep and physically demanding and David must have been glad of his climbing experience.

The field survey of the sheet, largely accomplished by David, took until 1970 and laid the foundation for his main geological contributions. The fieldwork centred on careful recording of the tectonic and sedimentological structures. This was an exciting time geologically with many studies contributing to the understanding of turbidity currents and to the style of associated sedimentary structures. Equally, the development and nature of polyphasal deformation in these Lower Palaeozoic successions was being widely reported. Elsewhere, in the Southern Uplands, considerable advances were being made in documenting and interpreting the Carboniferous and New Red Sandstone successions and associated intrusive rocks.

Against this background the decision was taken by the Survey to produce a new edition of the Regional Geology Guide to the South of Scotland. Given his background and concise writing style David became the senior author and overall compiler. The work was started in 1969 and published in 1971: a remarkable achievement. At its publication the book was rated an excellent account of the geology of the region. The Lower Palaeozoic section took full account of the revolutionary sedimentological and structural work which had been carried out in the 60s by, *inter alia*, Gordon Craig and Ken Walton. The text recognised the existence of fault-bounded tracts in the Southern Uplands; each tract containing rocks becoming younger to the north, although regionally the younger strata came on to the south. At the time this was interpreted as a series of monoclinal folds subsequently faulted, the whole resulting from compression of the basin structure during the Caledonian orogeny. Unfortunately these interpretations were soon to be overtaken by the evolution of plate tectonic theory and, in particular, by the new models published in the late 70s by McKerrow and Leggett who drew parallels with the tract nature of the Southern Uplands and accretionary prisms. Although this took a little of the gloss off the Regional Guide it should not cloud its merit, the description of the post-Silurian rocks, for example, still forming an acceptable account.

Following his work on the Guide, David, in common with his colleagues, became increasingly involved in non-mapping work as the Survey responded to the changing political philosophy of the time. David contributed over a wide range of activities including authorship of a summary report of Scotland's sand and gravel resources, and a range of reports, for

example, those for the new natural gas pipelines. He supervised a major project to metricate the extensive borehole records of the Survey and pave the way for their digitisation. He was involved in the compilation of a drift-thickness map for the Edinburgh area, one of a number of initiatives at the time to interpret geological data for the use of Land Use Planners. He also co-supervised and contributed to a major programme to reconstitute the existing one-inch maps geological maps as 1:50k editions. During these multifarious activities David continued to finalise his map interpretations of the Eyemouth area. The inevitable delays, however, meant that the maps were not finally published until the early 80s.

The associated memoir, of which David was the main author, was also affected by his other duties and although started in 1978 it was not published until after his retirement in 1988. The text is written in a characteristic clear and readable style and contains a mass of factual information. The significant amount of relevant and radical new work which was emerging at this time undoubtedly led to changes in interpretation between early reports and the final account. For example, David had originally accepted, during the survey, the arguments of Shiells and Dearman that the Coldingham Beds were structurally more complex than the main Silurian strata and therefore, by implication, older. However, the memoir recognises that, based on the work of Casey and Oliver in the early 80s, the complexity arises from syn-sedimentary structures and that, in fact, the Beds are younger than the adjacent Silurian strata.

This point illustrates the difficulty of writing definitive accounts of an area at a time of active research. This was perhaps particularly true for David whose major contributions spanned the whole revolution of plate tectonic theory and the plethora of new thinking on processes to which it gave rise. It is important to note however, that David's lasting contribution was the hard-won detailed field observations and the well-written texts which summarise them. Although some of the overarching models may change, it is these texts which form the essential foundation of the science.

David's contribution to geology was recognised by his election to the Royal Society of Edinburgh in 1975.

Apart from his direct involvement in geology, David was also concerned in the management of the unit. He became deputy to the unit head, G I Lumsden (who had succeeded Eden at the beginning of 1970) and, following Lumsden's promotion in 1980 to Assistant Director, David became acting head of the group. Earlier David had been heavily involved in the move of the Edinburgh office from Grange Terrace to the new custom-built and current home of Murchison House. He also had considerable input to the opening celebrations and was subsequently awarded the Queen's Jubilee Medal in 1977.

David was a meticulous and careful mapping geologist very much in the mould of his generation. He was determined if not overtly competitive and was a rather avuncular person who laughed readily and had an easy friendly nature. He played a major part in the Edinburgh Geological Society, acting as secretary from 1965 to 1970, as President from 1973 to1975 and subsequently as a Trustee. He also contributed to the Society's guide to the Geology of the Scottish Borders. Outside geology David had an interest in meteorology; he enjoyed sport and was a founder member of the Murchison House golf club and its first captain in 1979. He took up casual sailing and built his own craft which he sailed single-handed on the Forth.

The sea air obviously attracted David. During his survey of the Berwickshire coast he had a cottage at Coldingham and after his retirement in 1982 he moved to Elie in Fife. He died there on 4 July 1999 after a short illness. He is survived by his wife.

I am indebted to several colleagues for information and in particular to G Scott Johnstone who supplied data on David's early life and background.

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