REVIEWS

They Do Things Differently Here, compiled by A J Reedman and D G Bate, 2016. Angel: Malvern, 978-1-9088-3289-4, 317 pages, £12.99.

This fascinating book is sub-titled as *Stories from the International Division of the British Geological Survey*. As such it is a compilation of tales volunteered by 48 members of BGS staff (and their predecessors at IGS) who had visited a total of 37 countries across the world. Only Antarctica and North and Central America are unrepresented.

The stories are organised by decade and reflect the changing pattern of overseas deployment. The 1960s and 1970s were usually long-term appointments for several years so the staff (usually men) took their wives and families; there are a few wives' tales! The following decades saw generally shorter periods of weeks to months and the inclusion of women, at first for specialist tasks of dating or geochemistry but later for geological mapping and more general tasks. However, the same problems of coping with different climates, languages, local customs, food and transport run through the book, often with fascinating, revolting or amusing results.

The changing culture of health and safety is also demonstrated with stories of strapping a canoe to the strut of a small float plane in Guyana, a 70-mile open sea journey by fibreglass canoe (with outboard motor) in the Solomon Islands, and of the alcoholic captain of a ketch used for surveying the stormy Beagle Channel in southern Chile. These were the days before modern instant communications, when you really were on your own.

Erupting volcanoes (Montserrat), massive sand dunes (UAE and Mauritania), mud and more mud (most tropical places), active civil war (Yemen and Afghanistan), diplomatic spats (New Hebrides, now Vanuatu), problems with cocaine barons (Bolivia), a bee attack and sleeping over a cobra nest (Kenya), a mining scam with military government involvement (Bolivia), a gem scam (Botswana), and claims of cannibalism by the IGS (Sierra Leone). The intrepid geologists not only survived but completed their field work, trained local counterparts and produced maps and reports of lasting value.

Some of the accounts read rather like official reports 'having arrived at ... I proceeded to...' but they all demonstrate the enthusiasm and good will with which the geologists carried out their work. This is a very readable book and a real page-turner. If you are looking for a different travel book, it will take you to places very few people are likely to visit, unless employed as a geologist for a national survey or mining company.

Tim Colman

The Castleton Mines: a descriptive and visual history, by J H Rieuwerts and P Wolstenholme, 2016. Hucklow Publishing: Great Hucklow, 978-0-9563473-6-7, 133 pages, £25.

The authors have brought together an immense amount of information from archive and exploration sources. Regrettably, both show that there are considerable gaps in our knowledge; the Barmaster's Book for 1777-1784 is missing, and this was a critical period in the development of the Speedwell Mine. The only surviving contemporary plan of that mine is Ralph Oakden's plan of 1779, which shows several pipe veins as the miners knew them years before the canal tunnels reached them. But how did the miners know they were there, and at depths of 87 fathoms too? There must have been as yet unknown ways down from the surface, perhaps via the "lost" Hurdlow Stile Mine.

The book is very much concerned with lead mining, to the extent that Blue John fluorspar gets hardly a mention; similarly there is little discussion concerning calamine and sphalerite. Attention is focussed on the Castleton Liberty, but comments are added on the Hope and Peak Forest Liberties; unfortunately, the latter does not include the Coal Pithole Mine at Perryfoot, from where drainage goes via Speedwell Mine to Russett Well.

This book is a 'must have' for anyone interested in Derbyshire lead mining. It is well illustrated in colour and greyscale; a glossary and references are included.

Mill Close: the last great Derbyshire lead mine, by J H Rieuwerts, 2015, Hucklow Publishing: Great Hucklow. 978-0-9563473-8-1, 72 pages, £15.

Much has been written about Mill Close Mine over the years, with the accounts by W.W. Varnill, L. Stuckey and J G Traile covering the history of Edward Wass's involvement in the 19th century. Surprisingly none of those mention Old Mill Close, entered via shafts adjacent to the Red Lion at Wensley, which the author has added to the 19th/20th century survey in section and plan. Fortunately Jim Rieuwerts was given free access to the archives at Stanton Hall, home of Nicholas Davie-Thornhill, and much new information has been revealed, not least the detailed plans and sections that are reproduced as end papers. The history is complicated by the mine's extent into the four liberties of Wensley, Birchover, Stanton and Great Rowsley, each with their own variation of laws and customs.

The mine differs from most Derbyshire mines with its north-south alignment, largely beneath the shales, and with large caverns lined with ore. This trend raises the possibility of other such veins beneath the Stanton Syncline or under the Derwent Valley. Total production was around 500,000 tons of lead ore and 100,000 of zinc ore, and the mine always had problems with inflows of water, which peaked at around 5000 gallons per minute.

The book is well-illustrated, mostly in colour, but with many old photographs in monochrome.

both reviews by Trevor D Ford

Patterns in Stonework: the Early Churches in Northern England: a further study in ecclesiastical geology, Part A, by John F. Potter, 2015. Archaeopress: Oxford. British Archaeological Reports British Series 617, 978-1-4073-1393-1, 342 pages, 568 photographs (mostly b/w), £55.

East Midlands geologists are likely to be primarily interested in the two chapters of this volume devoted to Derbyshire and Lincolnshire, occupying the lion's share of the pages; the other counties covered are Cheshire, Durham and Lancashire. Splitting the monograph by county alphabetical order is unfortunate as Nottinghamshire is covered in a later volume. The octogenarian author, John Potter, has studied ecclesiastical geology for over 40 years, though in his retirement and freed from his administrative post, the pace of progress has accelerated. He has brought the skills of a geologist, in recognising rock type and bedding orientation in building stones cut from sedimentary rocks for specific purposes, to the attention of traditional church historians and archaeologists. Accordingly he has gone to pains to help the non-geologist in his descriptions, though his use of architectural terms can make for heavy reading. A glossary is provided, but does not include 'voussoir' (a wedge-shaped component of an arch structure). Until a decade ago Potter had published numerous papers in various journals on either individual or groups of churches, mainly in the south east of England.

British Archaeological Reports British Series (BAR) are A4-sized publications well-known to archaeologists, serving their communities' need to publish very detailed accounts since 1974. Geologically focussed reports have been published in the series, but are few in number: BAR 122 (1984) detailed Late Pleistocene sites in the East Midlands, mainly at Cresswell Crags. Potter launched an ambitious project of BAR publication in 2006 with Number 496, which is an introductory overview of ecclesiastical geology in Britain and Ireland, notably patterns of stone work in early churches. This was followed by BAR 578 devoted to Wales in 2013, and the sequels for northern England are Part 1 BAR 617 in 2015 (reviewed here) and Part 2 BAR 624 published in June 2016. BAR 617 is a massive work richly illustrated by sharp photographs, mostly black and white; occasionally the lack of a scale bar makes comprehension an issue.

Apart from the geologist's approach of identifying the lithology and provenance of the building stone (often difficult on weathered material and where hammering is not an option), the key to his work is the recognition of what he calls 'patterned stonework', a method of stone working by masons which he believes ante-dates the Romanesque style introduced at the time of the Norman conquest. In a project that has embraced the whole of Britain and Ireland, this term avoids using 'Anglo-Saxon'. which is inappropriate beyond the area of colonisation, though it could have been acceptable and more reader-friendly in this volume.

The monograph is divided into three main parts. First is a methodological review. Second is a discussion of masonry detail with reference to the earliest phase of church construction; this includes a geological map of the Pennines (though omitting Lincolnshire). Third is a church-by-church analysis seeking the patterned style of construction grouped on a county basis. The main conclusions are tabulated. Each church has a description stating whether Anglo-Saxon stonework can be identified. Three of the four Derbyshire churches pass muster, and just over half of the 52 Lincolnshire churches analysed have evidence of Saxon stonework.

Within Lincolnshire, Potter faced two geological problems; one concerns building stones cut from the Lower Cretaceous succession, and the other the source of diverse, rounded cobbles incorporated into walling. With respect to the former, a major problem is the current lack of exposure for comparative purposes. On the basis of observations made when ironstone mining was active (pre-1968), this reviewer suggests that much of what is taken to be Claxby Ironstone was probably quarried from either the Tealby Limestone or the Carstone. A hypothesis that the rounded cobbles of varying lithologies came from discarded ballast must be rejected in favour of glacial erratic derivation (though this is partially considered). East of the Wolds an extensive area of till with a northern provenance abounds with erratics on the surface of freshly ploughed fields. Historic hand picking is the likely source. The ballast idea was first proposed by Potter to account for lithologies present in the medieval walls of Great Yarmouth and even there a glacial source cannot be rejected. The church at Clee, correctly Old Clee and part of Great Grimsby, is famed for the diverse erratics incorporated in its Saxon tower. It is also the oldest building in the town.

As might be expected when the establishment is confronted with a challenge to its collective wisdom, Potter's conclusions have not met with universal approval. One critic, W. Rodwell, believes that the Saxons rendered their exterior church walls and whitewashed them to repel rain, and hence argues that the 'patterned style' is unimportant. One of the most important Saxon churches in the country is St Peter's in Barton upon Humber, the tower of which is undoubtedly rendered with mortar. Unfortunately, although Potter seeks to address Rodwell's criticisms, the details of the source reference are not cited (Rodwell, W, 2012. *J. Brit. Archaeol. Assoc.*, 165, 22-60).

Despite this nit-picking, the monograph is a tremendous achievement, and is just a part of a broader study. To compile this analysis entailed a prodigious amount of painstaking fieldwork and desk study. Our appreciation of the church geology in the East Midlands has been greatly enriched, and geologists will find much of interest within its cover.

Part B of this work is now published as BAR 624, runs to 270 pages, costs £49, and includes the churches of Nottinghamshire (ISBN 978-1-4073-1493-8).

Peter Worsley