REVIEWS

Fluorite, the Collectors Choice, edited by Jesse Fisher and others 2006. Lithographic LLC: Connecticut. ISBN 0-9715371-9-4, 128 pp. $30.
[*in UK from - Ian Bruce, PO#3967, Yeovil BA20 9AH (ian@crystalclassics.co.uk); Philip Taylor, Egis Lion House, Dyce Avenue, Dyce, Aberdeen AB21 0LQ; Paul Lowe, 3B United Downs Ind. Park, St Day, Redruth TR16 5HY (paul@lowestone.com)*].

This is a beautifully produced book with numerous fine coloured illustrations. It is number nine in an unspecified series. Aimed at the mineral collector it has been compiled by 33 contributors from countries around the world, only one British (Ian Jones, of Cardiff). Some entries were translated from other languages but it is not made clear which they were.

The book opens with one page on the classical banded myrrhine, which resembles Derbyshire's Blue John: a precis of its history is given but nothing is said about the original deposits generally thought to be in eastern Iran. An introductory chapter includes notes on atomic structure, crystallography, colour, commercial uses, fluorescence, luminescence and on the many variations of crystal habit from cubes with or without bevelled edges, through octahedra to highly complex forms some of which are almost spherical!

The main part of the book is divided into entries by continent and country. These are of a very varied standard, some give maps locating fluorite deposits, but most do not. Some outline the geological setting, but regrettably most do not. Instead emphasis is placed on the experiences of collectors. There are ten pages on British fluorites, including one page on Blue John, where the author was unaware of your reviewer's book on *Derbyshire Blue John* (Landmark, Ashbourne). Maps are given of Co. Durham and Cornwall but the Peak District gets short shrift. Other European countries with choice fluorites include Spain, France and Switzerland but are there no fluorites worth recording in the rest of Europe?

Numerous localities in USA, Canada and Mexico are noted in the chapter on the Americas, but the only country listed in South America is Peru. Asian countries include Russia, China, Pakistan and Japan. The Chinese equivalent of Blue John, now to be seen in many tourist shops throughout Europe in the form of carved animals and other ornaments is not mentioned. African fluorites seem to be restricted to Morocco and South Africa. Australia has no mention.

The book concludes with some useful short chapters on cutting facetted gemstones from fluorite, on fluid and gaseous inclusions, and on cleaning crystals. There is a two page list of references. From the attractive appearance of this book on Fluorite I expected a much more comprehensive treatment of *all* countries with fluorite deposits and of the geological setting of those deposits – I was disappointed.

Trevor Ford

Building Stones of Leicester – a Guided Walk, by the late John H. McD. Whitaker, 2006. East Midlands Geological Society, 32 pp, 39 photos. £5 (£3.50 to members).

From the original that was prepared in 1981, this guide has been edited and updated by Albert Horton, with assistance from members of the Society. With colour photographs and trail maps, it has been extended to cover more of the city, including shops and offices of the eastern precinct and the historic Roman and mediaeval buildings west of the civic centre. A total of 63 sites are identified and located on an excellent trail map which is colour-coded into the three areas of eastern, central and western Leicester. The complete trail length is 4.5 km and would take 3-4 hours to complete, but each area can be covered separately.

The guide is enhanced by a set of excellent colour photographs, allowing the reader readily to identify the rock types. Not quite so successful is, perhaps, the rather confusing collage of small photographs on the front cover and the patterned background of two pages of the civic centre section which makes reading the text difficult. However this is an excellent guide to any person with a geological interest who visits Leicester.

Helen Boynton

Exploring the landscape of Charnwood Forest and Mountsorrel by Keith Ambrose, John Carney, Graham Lott, Gill Weightman & Annette McGrath. 2007, British Geological Survey. Booklet, 52pp + map, ISBN 978-2085272570, £12.00. DVD video, 84 minutes, £5.00.

This booklet opens by describing the geological timescale from Precambrian to present in the context of the Charnwood Forest area, followed by descriptions of eleven geological walks, with annotated photographs of some of the localities. Another chapter briefly describes Charnwood's minerals, quarries and significant stone buildings.

The accompanying geological map is compiled from parts of the three local 1:50,000 sheets, simplified and scaled up to 1:25,000. All the walks are shown on the map with further enlargements for six of them. There are also some landscape photographs and the camera's location is usefully shown on the map. The key to the geological map includes brief descriptions of the rocks in each group or formation and is thus more user friendly than most geological map keys. Scales vary between the walk maps and no distance information is given in the text, so it is easy to over-shoot a locality.

When the reviewer road-tested Walk #1, it soon became apparent that although the way-finding instructions are quite good, the route marked on the geological map is inaccurate and misleading in places. This of course all adds to the challenge of a day out following a geological excursion. However, although the reviewer had never visited this area before, all eight localities were found, where the key rock features are easily seen and clearly described.

The booklet is in a style similar to the two earlier booklets, produced by the same team, that describe walks on Charnwood Forest (reviewed in the 2006 issue of *Mercian Geologist*), and this works well.

The video describes the geology of the Charnwood area chronologically in a series of chapters: Pre-Cambrian volcanoes and sediments, Dawn of life, Lower Paleozoic, Ordovician, Carboniferous and Triassic sediments, Mineralization & Quaternary. It plays on a TV or on computer with suitable software. With 84 minutes of concentrated information, it is important to be able to select individual chapters if concentration flags. There is no menu for this but the skip control can be used to step though chapters if this is available on the player.

Presentation in the video mainly takes the form of the viewer watching two geologists describing rock outcrops to each other. These conversations are interleaved by animations showing the tectonic processes and continental movements, videos of modern analogues (including Montserrat) and thin section close ups. There are visits to the laboratories at BGS Keyworth, including a description, that is well-explained, of how lead/uranium isotope dating is carried out using zircons recovered from rocks. Leicester Museum is also visited.

This all works very well; aimed at A-level students, the level is similar to that in an Open University programme, and is ideal for most Society members. One of the fascinations of geology is in the uncertainties in many hypothesis of the origin of formations. Commendably this is not avoided and where appropriate, alternative explanations are offered. Although there are talking heads, the camera stays mainly on the rocks while John Carney's pencil deftly points out the important features. The presenters are lucid and engaging without being intrusive. Locations are identified and most are easily accessible, many in and near Bradgate Country Park, and there are also descriptions of the rocks in working quarries not normally accessible including Brandon Hill, Whitwick, Longcliffe, Newhurst, Swithland Wood, Croft, New Cliffe Hill, and Mountsorrel.

The package of booklet, map and video is highly recommended for any Society member wishing to explore this geologically and scenically fascinating area.

Alan Filmer