REVIEWS

Quaternary of the Trent, edited by David R. Bridgland, Andy J. Howard, Mark J. White & Tom S. White, 2014. Oxbow: Oxford. 434 pages, 155 figures, 63 colour plates, 63 tables, CD archive of 6 appendices, 978-1-84217-461-6, £30.

The publication of this book is a major contribution to the surficial geology of the East Midlands and its conclusions have important ramifications well beyond the region. The book is an encyclopaedic, lavish, A4-sized, hardcover volume, being the culmination of the Trent Valley Archaeological Project, an initiative of English Heritage with funding from the Aggregates Levy Sustainability Fund. The Project's core team was active in the field from 2005 to 2007, and subsequently 21 workers have contributed to the multidisciplinary project's final outcome. Although the initial rationale was the elucidation of the river basin's Palaeolithic archaeology, only a relatively meagre number of artifacts have been found within it (less than 150 handaxes). That being said, it is their regional stratigraphic context which is the focus of the book and this has resulted in a veritable gold mine of sedimentary Quaternary geology. The editors have wisely enlarged their study area beyond the strict confines of the modern Trent catchment by extending it to the east coast. After all, the Trent flowed into The Wash via the Lincoln Gap until as recently as about 20 ka BP. Consequently the classic Kirmington and Welton-le-Wold localities in east Lincolnshire are included.

Space constraints do not appear to have been an issue for the editors, especially with the location maps. This is illustrated by the section on the Kirkby on Bain area of central Lincolnshire. Just two sites, a sand pit and a test pit, are shown on a large scale locality map (Fig. 2.66), yet perversely this map omits a number of former sand pits and the geology itself is assigned to a postage-stamp-sized inset. Some of the black and white photographs lack clarity; Fig. 2.56b achieves little, and Fig. 2.56c needs a vivid imagination to identify any ice-wedge casts. The caption of the latter should have added that this section is below the modern Bain floodplain.

A recent challenge by the Cambridge research group, to the reconstructed lower course of the pre-Anglian glacial stage Bytham River, suggests that it is more likely to have drained directly to the sea via The Wash embayment. Conventional wisdom had the Bytham draining into the North Sea near Lowestoft after taking an anomalous southerly course along the east side of Fenland via Mildenhall. This latter interpretation is retained by the authors in their palaeogeographic maps. If correct, the new view negates the concept of both a very early human migration from the coast into the Trent area up the Bytham River valley and a direct linkage between the Thames and Midlands drainage. Another thorny problem is the location of the Irish Sea ice limit in the upper Trent at the Last Glacial Maximum. This is left unresolved, along with the reasons for the diversion of the Trent at that time from its Lincoln Gap route northwards into the Humber. However, the Project's most noteworthy conclusion (and the authors admit this outcome was unexpected), is the compelling stratigraphic case made for an intermediate glaciation of MOIS 8 age in Lincolnshire, i.e. between the Anglian and Devensian Stages. This supports the basic hypothesis long argued by Allan Straw, against almost universal scepticism.

Knowing the reputation of the main contributors, the reviewer made a blind, advance order from the publisher. He was not to be disappointed and could hardly put the book down before reading the entire text. Consequently he recommended the book to two senior colleagues and both, following purchase, gave a similar approbation. East Midland geologists should not hesitate in buying this bargain-priced landmark work while in print, since the Oxbow web-site declares that the e-book version is currently unavailable.

Peter Worsley

A Guide to the Geology of Islay, by David Webster, Roger Anderton and Alasdair Skelton, 2015, Ringwood: Glasgow. 178 pp, 38 maps and figures, 142 photos, 978-190151416-2, £14.99.

Islay is the Scotland's southernmost Hebridean island, well known for its many distilleries and bird-watching opportunities. The roads are good and access to the important geological sites, mainly on the coast, is easy on foot. Writing geological excursion guides that are easy to follow is notoriously difficult but has improved in recent years. This book is the clearest guide I have ever used. Twelve walking excursions are described, each with a map, clear walking instructions and geological descriptions of localities along the way. There are photographs of most of the localities.

After a brief introduction to geology, a description of the geological framework of Islay will be where most Society members will start. Islay's rocks are mainly Precambrian, with Cenozoic intrusions and Quaternary features. The earliest rocks are dated at 1800Ma and 800-600Ma. The various plate movements that bought these rocks together, and the subsequent Caledonian tectonic events associated with the opening and closing of the Iapetus Ocean, are all bravely described and illustrated with maps and sections. Prior to publication of this long-overdue book, the only available material I could find was by Peach and Horne in 1923. Geological visitors to Islay will find this guide essential.

Alan Filmer