

## BOOK REVIEWS

FRIEND, P. F. 2009. *Southern England*. 414 pp. London: HarperCollins. Price £30.00 (paperback). ISBN 9780 00 724743 1.  
doi:10.1017/S001675680999029X

One of the many joys of geology is gaining sufficient insight into a landscape to enable four-dimensional vision. Instead of seeing just a hill, the insightful geologist sees gently dipping clays and sandstone strata, deposited during a marine highstand, overlain by a series of much more recent conglomeratic terraces, deposited by a river cutting and sculpting a modern valley. Unfortunately, even the most astute and experienced geological observer often cannot interpret a landscape alone without additional information and evidence, for example relating to absolute ages and rates and the way in which geology connects together regionally. This is especially true when the relevant features of the landscape are subtle or partly hidden by modern human activity.

*Southern England* by Peter Friend will be useful in this context to any amateur or professional geological observer curious about the landscape around her. The book starts with three introductory chapters setting out some current theories of landscape evolution and explaining key tectonic and climatic landscape-shaping processes before moving on through a series of chapters focussing on different areas providing complete coverage of southern England from East Anglia all the way to Devon, and Cornwall in the southwest. Each chapter explains the bedrock geology in terms of age, basic process of formation, and history of tectonic deformation using a combination of stratigraphic column, cross-section and photographs. Having established this foundation, bedrock geology is skilfully linked to landscape morphology via explanations of glacial ice-sheet history, sea-level changes, and the Holocene to modern history of drainage development. This is illustrated with a series of aerial photographs, topographic profiles and maps, some of which make use of geographic information system technology to delineate hill slope and drainage basin geomorphology. The result is an effective, clear and detailed explanation of landscape development that, with only a little bit of effort on behalf of the reader, provides much insight into the geological evolution of southern England.

As an example, the reviewer has been living in west London for the last year and wondering about various aspects of Thames Valley geology as alluded to in the opening paragraph. This book very nicely explains the history of the area, outlining development of the London Basin from Mesozoic to Palaeogene deposition in greenhouse climatic conditions, through Cretaceous and Neogene faulting and down-warping, to ice sheet advance and retreat and the final Pleistocene and Holocene episodes of fluvial terrace formation and down-cutting. All this explanation is achieved with a minimum of technical jargon, while maintaining a balance in the level of detail that is likely to be useful to amateur and professional alike.

In summary this is an excellent book providing much useful geological insight. It will be an invaluable part of a book collection for anybody living in or visiting southern England who has any interest in understanding the four-dimensional landscape around them more fully.

Peter Burgess

WALTHAM, T. 2008. *The Yorkshire Dales. Landscape and Geology*. 224 pp. Marlborough: The Crowood Press. Price £16.99 (paperback). ISBN 9781 86126 972 0.  
doi:10.1017/S0016756809006219

The Yorkshire Dales are a dissected upland terrain in the northern Pennines of England. One of the most accessible of National Parks, the Dales serve as a recreational area for visitors ranging from climbers to shoppers. Most will not realise that the park boundaries are essentially geological. The area is delimited by the Permian unconformity to the east, the Stainmore Trough to the north, and by steep faults on the other two sides: the Dent Fault to the west and the Craven Faults to the south. The 'Askrigg Block', so defined, has a northward tilt and therefore progressively younger Carboniferous outcrop from south to north, giving three distinct scenic areas within the Dales region itself. What better region then to explain landscape and geology in a book aimed at the general reader.

Tony Waltham's book is divided into three parts. First he describes the bedrock geology, then the geological influence on Dales landscape, and finally the human use of the geology and terrain. Geological information is presented clearly but without over-simplification. The text and well-chosen illustrations should be understandable to our 'general reader', but the geologist will learn much too. Here we benefit from the author being both geologist and caver. His enthusiasm for 'landscape' therefore extends well below the ground level that most of us see. He explains karstic features and processes in an authoritative and entertaining way, and the maps, sections and photographs of cave systems are highlights of the book. The subsurface emphasis also permeates the applied geology section, with a particularly informative section on the former mining activity in the Dales, as well as sections on quarrying, farming and tourism. The excellent content of the book is enhanced by the well-crafted text style and the excellent illustrations: purpose-drawn colour diagrams and the author's striking colour photographs.

With geology still declining as a taught subject in schools, the subject needs the advertisement provided by excellent popular books like Tony Waltham's. He has justifiably made the reader understand that both landscape and activities in an area such as the Yorkshire Dales are rooted in the geology. Our climber will understand this better than our shopper, but all visitors to the Dales should enjoy this book.

Nigel Woodcock

CUNNINGHAM, W. D. & MANN, P. (eds) 2007. *Tectonics of Strike-Slip Restraining and Releasing Bends*. Geological Society Special Publication no. 290. vi + 482 pp. London, Bath: Geological Society of London. Price £100.00, US \$200.00; GSL members' price £50.00, US \$100.00; AAPG/SEPM/GSA/RAS/EFG/PESGB members' price £60.00, US \$120.00 (hard covers). ISBN 9781 86239 238 0.  
doi:10.1017/S0016756809006025

This special publication of the Geological Society draws together a collection of 17 papers stemming from an international conference hosted by the Geological Society in September 2005. The volume focuses on the complexities which arise when non-planar strike-slip faults develop