



conventional geological guides to be able to locate and find these in the field. It is admirable that the authors make efforts to explain rather than just document: in the main text examples of this approach include explanations of the origins of changes in stratigraphic thickness, the geological structures, coastal landforms and major features such as landslips. Separate asides at appropriate places in the text include: 'Caves, Arches, Stacks, Coves and Landslides', 'Fossil Collections', 'Local History', 'Quarries and Quarries', 'Victorian Geologists', 'Cottages and Castles', and 'Fossil Fuel'.

The final bit of the itinerary is in part a repetition of material already covered in the main transect, but is designed to act as a guide to accompany boat trips from Lulworth and around Swanage. Again, superbly illustrated with colour photographs, this section provides an account of the main changes in geology and landscape which are visible from offshore: it is illustrated both by panoramic sea-level photos of the whole coast section (perhaps reproduced at too small a scale to be really useful on the boat) and highly vertically-exaggerated sketch geological cross-sections of the cliffs. References here to small-scale features and fossils, visible only onshore and up-close, might frustrate the reader; or encourage them to go back and visit on foot. The final paragraphs deal with the underwater geology of the area. Stunning colour imagery of the sea floor topography from the Dorset Integrated Seabed Survey demonstrates the patterns of rock ledges on the offshore (Pleistocene?) coastal platform, which define the overall periclinal structure of Weymouth Bay and enable you to map the patterns of fault displacement. You can also see the superimposed contemporary sand and shingle mega-ripples which had an influence on the Olympic sailing events in 2012.

The glossary explains common geological terms to the lay reader; though the choice of terms, including 'calciostromianite', seems a little random in places. The list of further reading provides an appropriate background of historical documents (Arkell's book), previous popular geology books and Geological Survey volumes, but does not extend to the primary sources that have obviously contributed to the material in the book.

Overall this is an accessible, informed and highly readable account of the geology and scenery of a classic area of British Geology. It should help enthuse visitors and give them some understanding of the spectacular scenery and its origins. For those with some experience of Dorset geology it is well worth its price for the historical insights and the novel aerial and ship-based pictures!

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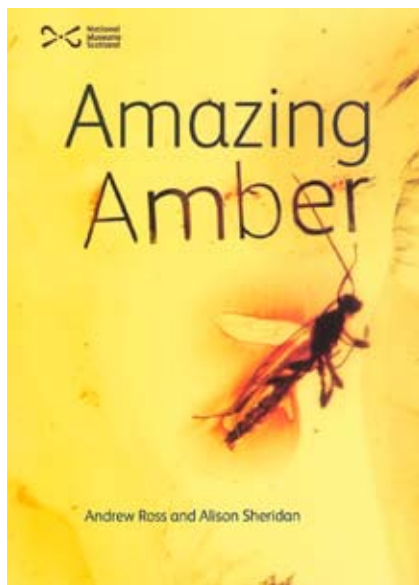
### **Amazing Amber**

Andrew Ross and Alison Sheridan. 2013. National Museums Scotland. 64pp. £7.99 (softback). ISBN: 978-1-905267-79-8.

This very nice little book has been produced to complement an exhibition of the same name at the National Museum of Scotland (10th May to 18th September 2013). However, it is not strictly a souvenir guide. It only includes around half the items on display at the Museum, so should also function to attract people to see the exhibit. It forms a nice stand-alone book in its own right, albeit one that can be read from cover to cover in a little over an hour.



Following a short foreword and introduction, the chapters include: What is Amber?; Where is Amber from?; Amber in Scotland's Past; Amber Jewellery; Decorative Amber; Fakes; Insects and other Inclusions; DNA from Amber; followed by a short bibliography (general reading rather than academic works) and the acknowledgements. Although general and global in scope there is, not surprisingly, a strong emphasis on the 5,500 year-old Scottish association with amber, as evidenced from archaeological sites. The text reads well and is accurate and up to date, correctly citing the oldest inclusion-bearing amber as from the Triassic of Italy. Various dates have been proposed for the age of Baltic amber as a result of different dating methods. Here, the authors have opted for the younger end of this spectrum (28–38Ma), whereas elsewhere in the scientific literature an age assignment of 44–49Ma is not uncommon. The authors refer to



the 400 insect species described to date from Dominican amber, but the actual number is probably around twice that value (see Penney, 2010) and considerably higher still when the non-insect fossils such as spiders are included. Despite the brevity of the text a reasonable amount of the content was new to me (even as an amberophile of two decades). The book is richly illustrated throughout and I found the images of the Hunterston Brooch (p. 26) and the religious carving (p. 40) particularly impressive. Also of interest was the unusual cattle charm (p. 29) that would have been dipped in the drinking water of sick cattle, whilst chanting a spell, in order to cure any ailments.

The general layout of the book is pleasing to the eye and the 150+ photographs are sufficiently large and clear. These are split approximately evenly between palaeontological inclusions and others (raw amber, historical artefacts, contemporary jewellery), hence striking a good balance in the content. Several new family or higher taxon records are photo-documented for various deposits: Cecidomyiidae in Chinese (Fushun) amber (p. 46), Miridae in Burmese amber (p. 50), Rhagionidae in Mexican amber (p. 55), Zygoptera in Mexican amber (p. 55), Geophilomorpha in Mexican amber (p. 55), Diplatyidae in Mexican amber (p. 55) and Tropiduchidae in Mexican amber (p. 56).

A handful of typos have slipped through the proofing stage (pp. 13, 57) and although Burmese amber is still referred to as such, the country of origin should now be cited as Myanmar (pp. 15, 38). Unfortunately, it would seem that the authors have been let down by their printer. At least in my review copy, many of the pages have smudges from the opposite page, while others have multiple black specks (e.g. pp. 39, 42, 43). Although in most cases these are very faint and will probably go unnoticed by the reader, I would not be happy (as an author and publisher) if I received this quality of work from my printer.



Despite these minor quibbles, I think this is a very nice book. It contains new information and new images, and at such a low price deserves a place on the shelves of anybody interested in amber, in addition to those interested in the cultural history and folklore of Scotland. It will also no doubt encourage many new people to delve deeper into the fascinating world of amber.

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**REFERENCE**

PENNEY, D. (ed.). 2010. *Biodiversity of Fossils in Amber from the Major World Deposits*, Siri Scientific Press, Manchester, 304 pp.

**Scottish Fossils**

Nigel H. Trewin. 2013. Dunedin Academic Press Ltd, UK. 118pp.  
£30.00 (hardback). ISBN: 978-1-780460-019-2.

For a small country Scotland boasts some of the most famous and scientifically important fossil localities in the world. This book provides a 'virtual museum' of more than one hundred scientifically important, interesting or controversial fossils and has been compiled and written by one of Scotland's leading palaeontologists. Hence, the information presented can be considered accurate and up to date.

The introduction provides the history of the author's interest in fossils and a brief history of Scottish palaeontology. This is followed by brief summaries of the variety and range of fossils found in Scotland (recorded in ascending stratigraphic order), with information on collectors, collections, preservation, palaeoenvironment and relevant palaeontological literature. There is also a list of palaeontology displays that can be visited at various Scottish museums. The introduction concludes with a summary table including the geological periods, major fossil deposits and geological events with respect to the region covered.

The majority of the book consists of photographs of the fossils with associated classification information, including phylum, class, species, locality, age and stratigraphy. Included are (number of fossils): Bacteria (2), Algae (1), Plants (12), Sponges (1), Corals (5), Worms (2), Bryozoa (1), Brachiopods (5), Cephalopods (8), Bivalves (6), Gastropods (2), Echinodermata (9), Graptolites (3), Arthropods (14), Fish (15), Amphibians (4), Reptiles (5), Mammals (2) and Trace Fossils (7). Each of these sections is accompanied by a brief introduction to the group and each fossil

