

Canadian Nature Guides — Fossils

By Chris Pellant
Smithmark Publishers Inc.
New York, New York
192 p., 1992, \$4.99, paper

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Wow, finally, a Canadian nature guide to fossils! Just the thing, you might think, for the weekend paleontologist to take along to the cottage or to keep in a backpack or the glove compartment of the car. A handy reference to help identify all those mysterious little fossils picked up in the field or on weekend walks, and now accumulating dust in a box somewhere. But wait; look again. Written by an Englishman and endorsed by the Royal Society for Nature Conservation in Britain? An American publisher? Printed in Singapore? Well, surely the contents must have a decidedly Canadian slant. Sorry, not a chance.

This attractive little wire-bound volume, packed with colour photographs, and proudly bearing the adjective "Canadian" in the series title, proves once and for all that you can't judge a book by its cover. A quick flip through the 192 pages sandwiched between plastic-protected endboards reveals no obvious Canadian connection. Lots and lots of European content to be sure, and even a few things immediately identifiable as hailing from the United States. But a careful page by page scrutiny of the more than 300 colour photographs of fossils yields the remarkable total of two illustrations of specimens from Canada! A quick tally shows that more than 80 of the illustrated examples with locality data are from the United Kingdom. 19 or so are from "Europe", seven from France, and three from Germany; the former Czechoslovakia, Italy and Australia contribute two apiece, each equaling the meagre Canadian contribution.

This does not bode well for the utility of the book as a guide to national paleontological discoveries! Of the two token Canadian entries, the trilobite featured on the lower half of page 73 is both misidentified, and likely mislo-

cated. It is *not*, as the heading states, *Ogygopsis*, but rather *Olenoides*. Although it does come from British Columbia, it almost certainly does *not* come from the Burgess Shale (I suspect it was collected from the famous trilobite beds on nearby Mount Stephen). The brief accompanying description seems to match neither *Ogygopsis* nor the *Olenoides* of the photograph. The phrase "many thoracic segments" is hardly applicable to either genus, since *Olenoides* has only seven and *Ogygopsis* eight! And neither is characterized by a particularly "deeply furrowed glabella". A perusal of the other trilobite entries turns up several additional incongruities. For instance, on page 81, *Trimerus* is described as lacking eyes; to my knowledge, all known species of the genus possess eyes, albeit relatively small ones. *Calymene* (p. 82) has 13 thoracic segments (clearly visible in both illustrations), rather than the 12 stated.

The second national representative, and truly a Canadian fossil in every sense, is correctly identified at the top of page 163 as *Bothriolepis*, an armoured fish. In fact, as far as I can tell, the illustration is of the species *Bothriolepis canadensis*, first described in 1880, and long associated with the world-famous fossil locality at Miguasha on the south shore of the Gaspé Peninsula in Quebec. How unfortunate then, that the locality in the description is given simply as "Scaumenac Bay, Canada", the no-longer-used Anglicized version of Baie d'Escuminac; even Escuminac Bay would have been better (and why no provincial designation? At least British Columbia warranted that much).

Both explicitly Canadian entries come from classic sites that are located within national or provincial parks and are protected by law. One can visit these sites, enjoy interpretive programs centred on their paleontological significance, and view the fossils in place, but one cannot collect.

The obvious emphasis of the volume is on Mesozoic and Cenozoic fossils. In Canada, the bulk of the fossil-bearing rocks of these eras is found in the western half of the country, with thick sequences exposed through the relatively inaccessible mountainous regions of Alberta and British Columbia. However, because of the decided British and European bias, relatively few of the illus-

trated fossils have representatives in these rocks. Fossils from lower Paleozoic rocks, such as those extensively exposed in eastern and central Canada and also in the Rockies, are under-represented and are again dominated by non-North American examples. Even the introductory pages and bibliography have little to offer a Canadian reader, with the majority of references being to British examples and resources.

What of the book in general? Although it is written in a friendly, easy-to-follow, jargon-free style, there are many minor technical and editorial slips that might cause confusion. For example, in the section on fossil plants, Precambrian stromatolites are referred to as "algal mounds" (p. 16), or as having been "secreted" by "blue-green algae" (p. 25). Researchers now agree that most of these layered structures were built by bacterial communities through the trapping and binding of fine sediments. On page 17, a vascular plant is defined as having "veins", an unusual term for the bundles of internal tubes used to move water and nutrients up and down within stems and roots. On pages 20 and 21, the photographs of *Calamites* and the *Neuropteris* leaflet have been reversed. The list goes on.

So, what does this book have to offer those of us who yearn to learn something about Canada's spectacular paleontological heritage? In a word, nothing. Can it be used to reliably identify common kinds of fossils found in this country? Not really. The book was obviously written in Britain for British users, and has little or no relevance for fossil collectors or students of nature outside the United Kingdom and western Europe. The add-on series appellation is clearly a marketing ploy to entice the unknowing consumer into purchasing an essentially useless reference. No doubt the same book, and others in the series, will turn up in other unlikely places, perhaps under such guises as the "Australian/Czech/Italian Nature Guides".