

Book Review

'Out of the ocean, into the fire'

History in the rocks, fossils and landforms of Auckland, Northland and Coromandel'

By Bruce W. Hayward. 336 pages, \$49.99

Your two editors have both known Bruce Hayward for many years, in one case from schooldays, in the other from the (late lamented) Auckland University Field Club. He has had a long and distinguished career, primarily as a geologist but also in palaeontology and marine ecology, not to mention excursions into biology, vulcanology etc. etc. He has published at least 17 other books, ranging from volcanoes, through kauri timber dams, to the story of cinemas in Auckland (his father owned a well-regarded cinema). One could basically say that, if there is an interesting subject out there, Bruce has had a penetrating look into it.

I was recently looking through our copies of *'TANE—The Journal of the Auckland University Field Club'*, dating back to the 1970s and 1980s. Bruce's name crops up again and again as an author or co-author of articles ranging from, for example, 'Foraminifera and Ostracods in offshore sediments', through 'Lichens on Rakito Island', and 'Archaeological sites on Rakito Island' to 'Lichen growth and grazers: five years of monitoring lichen quadrats at Kawerua'. All of these articles, plus three more, from just Volume 28 (1982) of *'TANE'*.

So why should this latest book be of interest to members of a Rotorua-based botanical society? Firstly, because of the significant contribution of volcanic ash, derived from eruptions in the Central North Island (which had profound impacts on the flora of the region), to the geology and soils of northern New Zealand; secondly, because much of what is in it is very relevant to the Bay of Plenty region; thirdly, because the book

deserves close attention from anyone with an ounce of scientific curiosity; fourth, because it is a beautiful and well-crafted book, and, of course, because without ‘landforms’ there would be precious few plants for us to study and admire.

On a first look, the wrap-around front cover (which also functions as a handy page marker) commands attention – a stunning aerial view of Little Barrier Island (Hauturu) showing the landforms in great detail. Inside, the illustrations are seen to be profuse and brilliantly reproduced; of the book’s 336 pages I could find only 22 without any illustrations and almost all of these illustrations, except for some historical photographs, are in full colour.

There are a total of 13 chapters, commencing with an Introduction to Geological Terms and Concepts – detailed yet very lucidly written – invaluable for geological ignoramuses like me. Chapters 2 to 12 move forwards in time from the period when the land that was to become Aotearoa first emerged from the sea (300 – 110 million years (Myr)) ago, up to the present day.

Scattered through the various chapters are numbered Boxes giving detailed information on some topic of interest, often spreading over more than one page. For example, Box 30 deals with petrified wood, and I was interested to read that the most common petrified wood samples found in the Coromandel volcanic sequence are Southern beech and *Casuarina* (the latter did not survive the ice ages.) Box 35 features some old basalt stone buildings from Northland and Auckland – an interesting historic touch. On a similar theme, Box 40 shows early drystone walls from Northland and Auckland, with notes on their construction. Box 54 discusses swamp kauri deposits – a very topical issue in the Far North at present.

The photographs range from landscape and geological features through to close-ups of rock formations, rock types, geological specimens, fossils of plants and animals.

The text is clearly written, easily comprehensible and well-arranged and organised. The final chapter (13) is titled: 'Local map guides to features of interest' and is just that – a most useful guide to take along if you're planning to visit the northern part of the North Island. It will lead you to dramatic scenery and most interesting places.

If you are planning a holiday trip to the northern North Island, and have time to look at the landscape and landforms more closely (take the time!), this book is an ideal, informative and most pleasing companion to take along. If you are interested in how landforms and landscapes evolve, my advice is the same. Highly recommended.

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