B. "latifolia" c953m, trib. of Ada R.
B. penna-marina (Poir.) Kuhn c920m, trib. of Anne R.
B. procerum sensu. lato. c1,015m, trib. of Anne R.
Polystichum cystostegia (Hook.) Cheesem. c1,540m, Philosopher's Knob.
P. vestitum (Forst. f.) Presl
Cystopteris fragilis (L.) Bernh. c800m, Henry Valley.

THE BOTANY OF AUCKLAND. A BOOK FOR ALL SEASONS. By Lucy M. Cranwell. Published by the Auckland Institute and War Memorial Museum. March, 1981. Price $6.25.

Eric J. Godley

This book is beautifully written and attractively produced. It tells the story of the native plants which have survived within and around the most densly populated part of New Zealand. Although Grafton Gully has been disembowelled by a motorway, and swamps drained, lava-fields encroached upon and volcanic cones quarried, there is still much to be seen within city and suburb. On the shores of Waitemata and Manukau, not far from the centre of Auckland city, are small and valuable bush and tidal reserves. Further afield, the two ranges in the region, Waitakere and Hunua still retain some of their earlier glory. The exposed west coast contrasts with the sheltered east with its mangrove estuaries; and further eastwards lie the small islands of the inner gulf, and beyond them again the beckoning peak of Te Moehau on the Coromandel Peninsula. It is indeed a most rich and diverse region which Dr Cranwell has described, mainly in a radius no more than 60 km from Queen Street. The vascular plants listed in an appendix number about 650, and there are some 240 seaweeds, green, brown, and red.

The book first evokes the vegetation around Auckland in the time of the Maoris and early settlers, and then describes the reserves or remnants of wild places in Auckland City and over on the Shore, and in Manakau City and south to Papakura. Valuable comparisons are often made between the present condition and that recorded in "The Botany of Auckland" by Wall and Cranwell (1936,1943). And here we see the earlier book becoming even more significant as an historical record. In the case of Grafton Gully the earlier description by Professor Wall and Dr Cranwell appears to be the only record which we have. Botanical Society members will note the use made here and elsewhere of contributions to the Auckland Botanical Society Newsletter. Your records and descriptions can be more useful than you think.

The section on coastal vegetation has an excellent outline of seaweeds, their kinds and uses and where and how they grow. Then there is the world of the mangroves and the plants of the dunes and the coastal trees nearby. Of the islands Rangitoto receives pride of place and so it should, because the colonisation of this new volcanic cone is one of the wonders of our vegetation. The story as told by Dr Cranwell is a good example of the breadth of her approach. Plants and places have a past, a present and a future. They are influenced by soil, rock, climate, animals, and latterly man, who wondered and wrote about them, gave them names, used them, preserved them, or destroyed them. She recounts the Maori myth about the origin of Rangitoto, but also tells of the piece of wood under the basalt dated by C14. The lowly first invaders of bare scoria are noted, and the build-up to some 200 species of native flowering plants and ferns. Plants epiphytic elsewhere, such as asteliads and orchids, find themselves pre-adapted to grow here on the volcanic rock. The ratas and pohutukawas are no more than 200 years old. Then came wallabies, fallow deer and pines, followed by squatters who built baches and introduced exotic

plants, and by prisoners who built roads. The mounting pressure of excursions led to a Minhinnick cartoon.

The stories of the swamps, lakes and slow waters, the grasses and grasslands, the tea tree scrub and rain forest all show the same feeling for place and time. The kauri forest is described in its interlocking detail, and then particular forest reserves are mentioned, not forgetting the benefactors who made them possible, or stories of the millers who made them necessary.

The luxuriant epiphytic growth of the forests has a section on its own as have mosses and also ferns. Particularly appropriate is an account of cloud forest and cushion bog on the peak of Te Moehau, the most northerly locality of a few alpine species. Lucy Cranwell and Lucy Moore climbed up there in 1929 as research students, and found out many new things about the vegetation.

Many of the excellent line drawings by Eunice Reekie brought back memories of when I first saw them, while still at Takapuna Grammar School in the mid-thirties and learning botany from that great teacher Olga Adams; and how one eagerly looked forward to the weekly article on native plants in the "Star", written by Miss L.M. Cranwell and illustrated by "E.E.R.". The other illustrations in the book, including those of historical interest, are all happily chosen, and include a most interesting drawing by Dr Cranwell of a seedling northern rata with a ligno-tuber. But as well as the drawings and photographs the words make pictures: on the dunes of the Muriwai coast grow the "sand-healing, money-making pines", and behind them, by the dune-lakes, lives the "neat-stepping pukeko"; further south are "eel-happy" west coast streams; over on Rangitoto home of "tender-eyed wallabies", the fronds of kidney-fern are "as translucent as a tangiwai ear-drop"; and in fern land "the shedding of clouds of skin-tickling bracken spores" marks a hot summer's day.

So I would recommend this book to all of you. And

when you have read it perhaps you will go up to Auckland and see the mangroves, the Kauris, and Rangitoto for yourselves. And don't forget to see one or two of the relict stands of hard beech, the only Nothofagus species that far north. Dr Cranwell has something interesting to say about that too.

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