	Wellington, Henderson, Mt Eden, Swanson, St John's Lake, Taupaki, Onehunga, Northcote, Muriwai, Rewiti	
1886	Waimauku, Rewiti, Henderson, Waikumete, New Lynn, Woodhill, Manukau Heads, Taupaki, Mt Roskill, Manukau, Titirangi, Great Barrier Island, Mt Wellington, Motuihe Island, Onehunga	Mt Cook, Sealey Range, Whangarei
1887	Woodhill, Titirangi, Nihotupu, Henderson, Waikumete, Bombay, Waitakere, Kawau island	Te Aroha, Taranaki, Mt Egmont, Pongakawa (Otanewainuku Ecological District)
1888	Northshore, Woodhill	Mangonui, Te Aroha, Whangarei
1889	Waikumete	Te Aroha, Hanmer, Otira Gorge, Arthurs Pass, Bealey, Castle Hill, Sumner, Lyttleton, Dunedin
1890	No local collections	Arthurs Pass
1891-1895	No collections	
1896	Nihotupu, Rewiti	Hanmer, Timaru, Castle Hill, Mt Cook

Table 1. Summary of Ball's collecting in the different plant groups.

Plant group	Natives	Exotics	Totals
Ferns & fern allies	86	-	**86**
Conifers	9	-	**9**
Dicots	381	7	**388**
Monocots	14	8	**22**
Totals	**490**	**15**	**505**

Book review: Ocean Shores to Desert Dunes: the native vegetation of New South Wales and the ACT

Reviewed by Rhys Gardner

Except for our geologists' efforts (which only another Glacial could impede) mapping of the NZ landscape now seems to be just a business, trendy manipulations of imagery to benefit creatures like Kyoto and the dairy giants. I suppose a lot of this goes on in Australia too, but they have been luckier, firstly in having intact traditions in public service science and conservation, and secondly, in that dealing with the country's great size and diversity has required dedicated mapping of the fundamentals.

We see this in their Native Vegetation Mapping Program, which aims to cover all 0.8 million square kilometers of southeastern Australia at a scale of 1: 200 000. Officially begun in 1998, it builds on work dating back to the 1920s[1] and is being continued through fieldwork aided of course by modern technology (perhaps mainly through aerial photography rather than satellite data). In this splendid book David Keith of NSW's Dept of Science and Conservation presents a two-map synthesis of the very considerable achievements of the program to date.

Its Introduction discusses the ecology and post-human history of southeastern Australia's vegetation and the principles of vegetation classification and mapping. The 12 formations recognized for the region (NSW, ACT and Lord Howe Island) are then keyed out. Formations are the broadest units, diagnosed mainly by structure and appearance but sometimes also by their main stresses - drought, fire, frost and flood. Thus there are rainforests, sclerophyll forests (wet or dry), grassy woodlands, and so on to arid shrublands and "the alpine complex". Formation names, like those of plant families, are plural, because each typically

[1] Among previous examples of vegetation mapping in NSW the work of expatriate New Zealander C.W.E. (Ted) Moore gets plaudits – see Australian J. Bot. 1: 485-547, 1953.

spans a range of floristically-based subtaxa, called vegetation classes, 99 of which are recognized here.

In the main part of the book each formation is given a 4-page overview, then its classes follow in 2-page accounts. About half this is photography, all of it in colour - generally two or three individual photographs in the class accounts, from a range of contributors, pixel-perfect and intelligently captioned. They show the land as an Eden, with only the occasional farmhouse, fence and cemetery, untracked except for native creatures and a stock route or two, and without weeds.

The text for each class emphasizes distribution, community functioning and problems of conservation. A map at the top of each left-hand page shows in a colour-gradated way where in the region the class is best represented. Balancing it at the foot of the right-hand page is a coloured box "Indicative Species" to fill out the floristics (no mention of Wollemi pine, but !). I liked the colour coding of the boxes and page edges: rainforests get a rich blue, woodlands are dusky yellow, and the arid formations are gibber-orange. Common names, always good clean Aussie fun, are given (python tree, ooline), but family names are not, which is not quite so much fun, making one realize there is so much to learn just a few hours to the west (quick, what families do the trees *Gossia* and *Cadellia* belong to?)[1]**.** Every now and then mention of a species provokes thought. Why is *Carex appressa* not abundant in NZ as it is in eastern Australia? And why is mangrove increasing at the expense of salt-marsh in both countries?

The third part of the book contains the two big maps (these are also available independently, presumably in larger format), at 1: 2 million for NSW & ACT, and 1: 200 000 for Lord Howe Island. One shows the vegetation as it is today, while the other reconstructs the original pattern. (Call me Arcadian but I would have placed the latter on the front endpapers, leaving the bleached out modern one for the rear). An appendix summarizes the amount of area remaining in each vegetation class. A second appendix gives data at an even finer level, the vegetation community, listing localities for communities believed to be endangered, a godsend for consultants, lawyers and habitat-restoration groups.

In his Foreword charismatic member of the Australian megafauna Premier of NSW Bob Carr pays tribute to "the men and women who dedicate their lives to conserving and cultivating the landscapes so capably documented within these handsome, informative pages". I'm not so sure about the cultivation part, but otherwise echo his sentiments most sincerely, and, as a book-lover, most gratefully.

Ocean Shores to Desert Dunes: the native vegetation of New South Wales and the ACT by David Keith. Department of Environment and Conservation (NSW), Hurstville. Hardback, 353 pp.ISBN 0 731 6780 4. A$79.95.

[1] Myrtaceae, Surianaceae

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