

Book Reviews

The Awa Book of New Zealand Science

Rebecca Priestley (ed.). *Awa Science*, Wellington, 2008. 368 pp. ISBN 978-0-9582629-9-6.

New Zealand has a proud record on the international scientific stage, including three Nobel laureates. Spanning some 50 contributions, this excellent anthology outlines these celebrated researchers and their research while throwing light on the work of some lesser known but equally fascinating, New Zealand scientists. The *Awa Book of New Zealand Science* is not intended as an exhaustive compendium, and some of the selections are abridged ('... pieces have been edited to make them shorter and more focused on a single theme – usually that of scientific discovery...', p. xvi); it does, however, span a wide range of science, scientists and perspectives on the natural world and humans' relationship with it.

The contributions are arranged in a roughly chronological order, starting with a (contemporary) discussion of the navigation to and settlement of New Zealand by Māori through descriptions by early European scientist-explorers of the landscapes and biota they observed (often in a tone of some amazement), the pioneering work of New Zealanders in nuclear and radiation physics, and on to descriptions of modern sciences, including cosmology, materials science and paediatrics. The contributions range from the inspirational – Rutherford and Marsden's descriptions of Rutherford's pioneering work in nuclear physics – to the comic – Liggin's description of sheep exploding in the National Women's Hospital furnace – to the tragic – Buller's description of collecting (shooting) huia in the Tararua Ranges, to the poignant – Deiffenbach's early (1843) concern over the over-exploitation of whales in New Zealand's coastal waters; in doing so, they capture the joys, challenges and despairs of 'science', irrespective of flavour.

And what of geography and geographers? While few of the scientists represented in the *Awa Book of New Zealand Science* might call themselves geographers in the modern sense, many of them are describing the physical environment and the relationships of humans with it. This description of physical landscapes is epitomised in von Hochstetter's account of the famous pink and white terraces of Tarawera, Bond and Smith's report of their obliteration in the Tawera eruption, and in Cotton's description of landscape progression from his (1922) *Geomorphology of New Zealand*. Reading between the lines one can also trace the changes in human–environment relationships in New Zealand. This is perhaps best exemplified by some of the pieces relating to New Zealand's now much-depleted avifauna. Buller's (1883) and Reischek's (1880s) description of 'collecting' huia and hihi are almost oxymoronic – superb descriptions of natural history alongside our knowledge that the collectors were hunting the species to, and over, the edge of extinction. These early pieces are followed by a growing recognition of the bizarre nature of the endemic avifauna, including Richard Henry's (1903) description of the kakapo and Joan Telfer's depiction of the excitement in Orbell's celebrated rediscovery of the takahe in Fiordland. Finally comes PÉrrine Moncrieff's lament for what has gone – a story recurrent in subsequent environmental writing in New Zealand, such as Geoff Park's (1995) *Groves of Life: Ngā Uruora*. In some ways, these shifts in perspective tell us as much or more about New Zealand science and scientists as the contributions themselves.

The book itself is very nicely put together – the contributions are sympathetically edited, and each introduced by a short paragraph placing the science and the scientist in context, and the artwork (line art and black–white photography) is clear. Poems describing and interpreting the science and scientists they are

juxtaposed between dot the book and are an interesting inclusion. The *Awa Book of New Zealand Science* has already been much lauded and it won the inaugural (2009) Royal Society of New Zealand Science Book Prize. I cannot recommend it highly enough – I read it twice while pondering this review – and at \$48, it is a bargain for a well-produced hardback book. If you are interested in how science has been conducted in New Zealand, who has conducted it, and the impact of this research nationally and internationally, the *Awa Book of New Zealand Science* is an excellent starting point.

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Droughts, Floods and Cyclones. El Ninos that Shaped Our Colonial Past

Don Garden. Australian Scholarly Publishing, Melbourne, 2009. 414 pp. ISBN 978-1-921509-38-4.

Melbourne-based environmental historian Don Garden begins his book in dramatic fashion by recounting how the Ash Wednesday fires of 1983 destroyed both his temporary and new homes. Having caught the reader's attention, he moves on to show how major El Ninos between 1863 and 1903 affected in very tangible ways the history of Australia, New Zealand, Fiji and French Polynesia. A weather obsessive like myself takes little convincing, yet few history books from this part of the world have paid much attention to this fundamental part of life, anywhere.

By studying the big El Ninos of 1864–1869 (coinciding with New Zealand's major gold-rushes and a 'mini' ice age), 1876–1878 and 1895–1903, Garden shows how droughts and floods in Australia, floods, snowstorms and sometimes droughts in New Zealand and cyclones in Fiji and French Polynesia, disrupted colonial life and interrupted the smooth 'progress' which Victorians believed would automatically accompany European colonisation of lands in the supposedly 'balmy' South Pacific. Garden's meticulous study of newspaper, private and official metrological

records shows that although these impacts were important, they did not equal the devastation caused by similar weather events in much more populous Asia and Africa, where Mike Davis has demonstrated that millions died from starvation.

Garden also argues that disruptive as these cyclic events were, they did not cause as severe problems as global warming in recent years. According to his calculations, Australia has experienced far longer and more severe droughts since the 1980s than it did in the nineteenth century, even if the droughts of 1895–1903 wiped out about half Australia's sheep flock. As a result, Australia is drier than ever before in terms of its European history at least, and faces an unprecedented crisis of aridity. This conclusion echoes the warnings of many others, especially the late George Seddon and ecologist Tim Flannery.

The rest of the book is a model for others to follow. Garden is very generous to anyone else who has worked in this largely neglected field, and builds on the pioneer work of the likes of Peter Holland. In acknowledging these earlier efforts, Garden has shown that between these initial investigations and newspapers, government meteorological services and the records of individual farmers and settlers of various kinds, there are ample data for the filling in the gaps concerning the important part played by weather in shaping the lives of nations as well as individuals. Seventeen pages of appendices attest to the richness of the data. Evocative photographs and Garden's crisp prose make the argument very persuasive, giving the lie to fatuous media claims concerning 100-year weather events.

Careful attention to evidence, combined with the author's considerable experience as an historian in several fields, ensures balance. Critical reading of both primary and secondary evidence avoids the excesses of crude environmental determinism that could so easily undermine coverage of this particular topic. Garden, like Holland and others, also shows that settlers in Australia and New Zealand, in particular, found the vagaries of climate confusing even though they came from the British Isles – so maligned for its indifferent climate. In fact, weather in both Australia and New Zealand proved more extreme and inconsistent

than anything most migrants had experienced, despite the best efforts of government propaganda to promote the two countries as subtropical or temperate paradises. Garden's impeccable scholarship and industrious research across nations and hemispheres (research in London and Paris helped shape his arguments), has thereby not only shown how a whole new subfield might be established, but succeeded in breaking the long silence concerning some of the most erratic weather on the globe – an inconsistency not only caused by global warming, but by the El Nino/La Nina oscillation, which produced and still produces very different outcomes than in more consistent and predictable continental climates.

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Country Boys: Masculinity and Rural Life

Hugh Campbell, Michael Mayerfeld Bell and Margaret Finney (eds). The Pennsylvania State University Press, University Park, PA, 2006. 323 pp. ISBN 0-271-02875-0.

Country Boys is a compilation of articles written by prominent scholars concentrating on critical research explicating the notion that 'rural masculinity matters' (p. ix). The chapters focus on a wide variety of masculinities in rural areas, and highlight how the social construction of gendered relations are historically situated, spatially contextualised and in a continual state of flux. Focusing primarily on masculinities in the countryside, the book also addresses the influence that rurality has on urban spaces. The authors speak to these issues by analysing the actions and behaviours that men employ which reinforce normalised conceptions of 'masculine rurality' and 'traditional manhood'. To emphasise these points, the book is broken down into three sections: (i) Practices; (ii) Representations; and (3) Change Over Time.

Part 1, 'Practices', describes how rural spaces affect the social reproduction of men. The chapters included in this section draw attention to situated forms of masculinity in rural locales and illustrate how 'being a man' is a multifac-

eted negotiation of gendered relations. Touching upon research ranging from sustainable cultivation versus industrial agriculture (Peter *et al.*), contrasting versions of success in farming (Barlett), the paternalistic dynamics of capitalism in small business ownership (Bird), local and public masculinities found within drinking establishments (Campbell), traditionally idealised and 'rooted' (p. 110) perceptions of manhood (Ní Laoire and Fielding), right-wing militia ideology and white supremacy (Kimmel and Ferber), as well as men's health issues in rural settings (Courtenay), Part 1 clearly demonstrates how 'what men do' in particular rural spaces designates them as 'masculine'.

Part Two of the book, 'Representations', examines the relationship that rural images, ideas and icons have on what constitutes masculinity. The authors discuss the elements of material rural life that signify 'manhood' and how rhetoric, advertising and everyday practices are spatialised. Each piece included in this section also examines how symbolic markers of rural masculinity become powerful regulatory forces for individuals in urban spaces and the countryside. Drawing upon research from a wide range of topics, including rural homosexuality and heteronormativity (Bell), embodied corporeal practices in the relationship between sexuality and space (Little), the marketing of alcohol across rural sites in New Zealand (Campbell), mediated representations of masculinity found in the forestry industry (Brandth and Haugen), as well as the creation of warrior-mentality military heroes in rural sites (Woodward), these essays further advance our understandings of gendered imagery and the resonance they have in formulation of masculinities in rural spaces.

The last section of the book, 'Changes', discusses the potential progress that can be made if normalised conceptions of rural masculinities shift from idealised, unchallenged traditions to alternative perspectives of gendered relations in which a plurality of masculinities are accepted. Focusing on the limitations evident in the formation of archetypal rural masculinity, the two concluding essays address the underlying presence of power in the construction of 'rural masculinity.' The chapters include a comparison of taken-for-granted perspectives on