

*Ravaged Beauty: An environmental history of the Manawatu*

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Reviewed by Peter Holland

This attractively designed book has been printed on matte paper with wide margins and is illustrated by numerous monochrome and colour images, as well as period photographs reproduced in a sepia tint, all with minimal grain and print-through. Those features and the attractive page layout are evidence of a skilled book designer working in collaboration with the printer. Another admirable feature is how the author places additional information in framed and tinted blocks of text throughout the chapters to avoid breaking the flow of the story. The topics range from when the last moa was likely seen in the Manawatu, through biographies of locally and nationally important figures such as the Danish settler Ditlev Monad and the influential agronomist and educator Bruce Levy, the aspirations and activities of several present day farmers, and features of the Awapuni Lagoon. The sequence of chapters is chronological, with key environmental themes criss-crossing the narrative. I felt, however, that the author could have usefully involved the social science model of place-making, and would have welcomed a little more information about the attitudes and beliefs that drove the first two generations of European settlers, especially the importance of ideas relating to the status of indigenous compared with introduced plant and animal species.

The book opens with a brief account of the area's distinctive geology and indigenous vegetation, and highlights aspects of its hydrology and landforms. It would have been helpful to have had more information about the origin, nature and age of unconsolidated sediments, a summary of the area's weather and climate, a chronology of known floods and their magnitudes, and information about the impact of vegetation clearance on surface sand deposits. The second chapter is longer, and is about the Manawatu on the eve of organised European settlement. The author makes effective use of research findings in archaeology and pollen analysis but I felt that more could have been made of early European accounts of the area. One possible source is the diary of John Newland, who landed in Wellington in 1841 and wrote about people and places there and farther north. Even better is the diary of Joseph Greenwood (1841-47), who walked through the western Manawatu and wrote about its landscapes and Māori inhabitants.

The early years of European settlement are discussed in Chapter 3, which draws upon the reports of Edward and William Wakefield, early survey maps and commentaries such as those of Charles Kettle, a fine witness to conditions in early New Zealand. These sources confirm a broad expanse of closed canopy forest peppered with large and small openings, and occupied by a small resident Māori population who apparently did not resent the presence of European settlers until problems arose in the course of surveys for denser settlement and land acquisition. The author notes that subsequent environmental changes were of a scale and magnitude probably not envisaged by the early surveyors and settlers' organisations. As was the case elsewhere in the country, major environmental problems were scarcely apparent to the first generation of European settlers, despite events like the Fielding flood in 1874 and the published warnings of commentators like T H Potts in Canterbury. Government was, however, establishing commissions of inquiry to report on the state of New Zealand's forests, and by the 1890s settlers throughout the country were becoming aware of links between vegetation clearance and flooding, accelerated soil erosion, accumulations of sediment in lowland reaches of rivers and streams, as well as reduced water storage in hill country catchments.

Chapter 4 is a detailed account of environmental transformation by saw millers and rural settlers in the Manawatu. In the 1870s and '80s, official reports in the *Appendix to the Journals of the House of Representatives* suggested little need for the country to preserve its native biota, the prevailing view being that indigenous plant and animal species would inevitably die-off when evolutionarily better-fitted introduced species became established so fell the trees before they disappear. There was also scant public awareness of a looming shortfall of timber for milling, and on page 80 the author quotes from the *Handbook of New Zealand* about the Manawatu's 'almost inexhaustible supply of the most valuable timber.' There were dissenters, but it was not until the late nineteenth century -- when Leonard Cockayne and several influential visiting commentators could draw upon ecological thinking and apply it to ecosystem transformation, including forest clearance -- that a marked shift in official thinking became evident. By then it was too late to save more than patches of the once extensive forests and wetlands of the Manawatu. In this chapter, the author skilfully summarises a complex story distinguished by settlers' heroic energy and their selective blindness to the environmental consequences of large-scale land clearance. They were inspired by a faulty vision and driven to proceed at full tilt even though growing awareness of the New Zealand environment pointed to the need for a cautious approach to environmental transformation.

From the late 1880s to the 1920s, events and experiences in the Manawatu were of considerable interest to settlers elsewhere in New Zealand, including the selection and propagation of varieties of economic plants such as a cultivar of perennial ryegrass from Sanson that could extend the useful life of sown pastures in Canterbury. Through the activities of government scientists, the Manawatu became both source and repository of best practice for rural people across New Zealand by trials of seed mixtures suited to particular topographic features, experiments with procedures for pioneering hill country, specification of mineral fertilisers for crop land and pastures, and development of reliable ways to manage pests and diseases.

Chapter 6 is a brief survey of 125 years of flax harvesting in the Manawatu, a well-illustrated and informative survey of an industry that transformed the extensive wetlands. It is followed by a long chapter about rivers, run-off and drainage in an area that is the gift of the rivers that bring down sediment from the eastern uplands and deposit it in the lowlands. The wild ways of the Manawatu and Rangitikei Rivers were then and still are threats to permanent settlement, but without flood ways, stop banks, diversion channels, river straightening, strong bridges and dredging the area would pose even greater risks. The illustrations and text in this fine chapter allow the author to comment on the high environmental cost of more than a century of land transformation: notably, lost forests, drained wet lands, river channels clogged by accumulations of sediment, polluted water and damaged top soils.

When he was Minister of Works, Robert Semple recognised the importance of a whole-of-catchment approach to river management, and much the same is true of environmental rehabilitation. What took less than a century to dismantle will require several centuries to rehabilitate, but even then the 'old Manawatu' will not be recovered. Residents need to appreciate the role once played by forests throughout the area, and not only in the head waters of rivers and streams. They also need to know how large and small areas of wetland regulate stream flow, and the advantages of a mosaic of economically productive farmlands set in a mesh of large and small areas of native ecosystems. Some of the most influential figures in agricultural land use across New Zealand, authorities like Bruce Levy and James Wilson, were based in the Manawatu. Will this area spawn a new generation of nationally influential figures to steer New Zealanders from the industrial landscapes of intensive farming towards more sustainable combinations of economic and conservational land use? And can we strike the balance between the competing demands of economic production and conservation? Despite the book's title, Chapters 9 and 10 suggest grounds for optimism.

When a book touches on as much territory as this one it may seem churlish to ask for more, but I would have welcomed further detail about large and small human settlements and infrastructure because a rural landscape is more than the aggregate of its farms. I would also like to know if the trajectories of environmental transformation in the Manawatu were played out in other parts of the country, and if ideas and practices developed elsewhere in New Zealand impacted on it. Until the 1930s, the different farming regions of this country formulated their own stances to environmental transformation. In Canterbury, for example, Agricultural and Pastoral Associations played a major role by promoting certain land uses and advocating tree planting and species conservation. Were there equivalent organisations in the Manawatu? I would also have welcomed consideration of the area's boundaries. Figure 4 on p.22 of Chapter 1 shows a rectangular area, but I felt that the hydrological catchment might be a better unit. It would also accord with current thinking in environmental management as well as Robert Semple's perceptive comments about flood control.

This interesting, well-written, attractively designed and printed book is a useful addition to the growing number of publications about the environmental history of New Zealand. In its historical sweep, geographical coverage and reference to diverse environmental features and challenges, it will especially interest Manawatu residents and individuals who wish to know more about the 'big story' before setting out to explore individual topics in depth.