

statement. According to the accompanying notes, these maps show "the likely location of the various soils" and are intended only to be "a guide to soil distribution". While these qualifying statements are acknowledged, overlaying the maps produces soil map coverage of more than two-thirds of Tasmania (slightly over 40% forest-covered), even including some of south-west Tasmania, which is said to have been deliberately excluded! Areas of known agricultural land may well have small forest remnants, but a fuller description of the methodology used to produce these maps would have avoided this uncertainty. At the very end of the book (Appendix 2) is a list of plant species mentioned in the site descriptions, with their families and common names. This information is not provided for the extra species on the vegetation species lists in Appendix 1. Amateur botanists beware!

In summary then, how would I feel as a forest manager seeking information about my soils from this handbook? The information in it could certainly be used to identify some of my soils and the factors that influence their productivity. But what do I do when they don't match any of the pictures, or I find a boggy hollow in the middle of my well-drained slope? Call a forest pedologist of course, or read the fine print a bit more carefully. Most of the answers are there if you look for them. Can we have one of these handbooks for New Zealand too?

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Sustainable Forest Management

Ferguson, I.S. (1996) Sustainable Forest Management. Oxford University Press, Melbourne, Australia. Hardcover. 162 pp including a 15 page list of references. ISBN 01955336042. \$NZ70.

Intended for "people interested in contemporary environmental management issues or pursuing studies in environmental science, natural resources, land management, or forest science", this book provides an excellent overview of issues concerned with sustainable forest management.

The book has 10 chapters. In the "Introduction" (Chapter 1), the author

identified publicly-owned native forests to be the centre of the conservation/development controversy. The author set the basis of the book as to contribute to a better understanding of sustainable forest management rather than to suggest simple solutions to the problems. He further introduced the economic concepts used for analysing the other chapters in the book.

The other nine chapters are organised into three parts. Part 1, on forest uses, has four chapters which deal with the properties of some of the most common forest uses or services, including conservation as a forest use (Chapter 2), recreation as a forest use (Chapter 3), water as a forest use (Chapter 4), and wood production (Chapter 5). In each of those chapters, the author gave a comprehensive analysis of each use in the biological context and then discussed the benefits and costs of each use in some depth. Professor Ferguson treated conservation as one of a number of possible uses of forests separate and distinct from recreation, range, wildlife, water, wood production, and other uses of forests. He admitted that conservation as a forest use is the most difficult area to deal with in terms of defining the benefits and costs associated with conservation.

Recreation

In "Recreation", discussions include the role of landscape in recreational use of forest, activities and factors influencing participation in outdoor recreation, different forms of recreation, and methods for calculating the benefits and costs of recreation. "Water" is discussed next. This chapter concentrates on the factors influencing the quality and quantity of water originated from forests. Here water is treated as a market good and a method for pricing water is presented with a case study as an example. Wood production, one of the most important commodities from forests, is discussed by product types in the last chapter of this part. It was shown that the costs and benefits of wood production are relatively easy to define.

Due to market imperfections for forest products, a variety of uses of public forests with very different objectives and characteristics and the need for sustained forest management, there are bound to be conflicts between different users and uses of forests, between different levels of governments, and even between Governments. In Part 2, the author proposed a hierarchy of levels of planning processes, from national planning (Chapter 6), regional planning (Chapter 7), to site planning (Chapter 8) to resolve the potential conflicts between different uses of the for-

est resources. Topics relate to different levels of forest management ranging from international agreements, national policy, institutional structures, to planning resource uses at the regional level and codes of forest practices.

Some of the issues relating to sustainable forest management are discussed in Part 3 in two chapters. Examples of the issues discussed are the forest rotation problem relating to joint production, the difficulty in defining and valuing natural capital, the change of the social rate of time preference, silvicultural consideration for sustainable forest management, institutional management, property right issues, supply and demand management of various forest products, and public participation in resource management.

Public Forests

The book uses public forests as the object of discussion, as Professor Ferguson repeatedly pointed out that public forests are the ones often most controversial and difficult to manage. As it most closely relates to New Zealand, Professor Ferguson supports the opinion that plantation forests can relieve the pressure on wood production from native forests. This is supported by the notion that the economics of joint production indicating a mixture of uses, or multiple use, may not always produce the optimum result.

Book's Strength

The strength of the book is integrating the biological, social, and economic basis for sustainable forest management. Although the book requires the reader to have some background in forest biology and economics, most of the material covered is self-explanatory and easy to grasp. Another useful feature of the book is providing case studies where examples are given to aid the digest of the materials presented in various sections. There are good discussions on various topics, for example, discussions on market imperfections and how they impact on sustainable forest management, the costs and benefits of various forest uses, and the importance of forest inventory in forest management.

This is a book worth reading for people (e.g., forestry managers, foresters, students and the general public) involved or interested in resource management, multiple use, social/community forestry, forestry economics, and environmental sciences.

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