

BOOK REVIEWS

THE MANAGEMENT OF FORESTS, by F. C. Osmaston. 1968.
George Allen & Unwin. 384 pp.

Mr Osmaston depicts how theory and practice of forestry in continental Europe in the last 200 years has influenced the evolution of the management of plantations and forests in Britain during the 20th century. He discusses also some limitations imposed by modern technology and thinking that could upset this somewhat narrow outlook. Nevertheless, *The Management of Forests* is primarily about what has gone on before, rather than a critical examination of modern techniques, on which forest managers are nowadays placing greater reliance.

The contents are thoughtfully ordered in a logical sequence. The first two chapters introduce some of the criteria that influence forest management as a whole. At the end of the second, statistics on world use of wood and wood products, gleaned from FAO surveys, are presented, but one is left wondering exactly how the author envisages forest managers would use them at a local or national level. Figures here for fuelwood consumption contain one of the few printing errors observed.

The next three chapters deal comprehensively with features of the idealized normal forest and its associated characteristic of a rigidly sustained yield. Many foresters, including myself, would prefer to see more emphasis given to methods of rationalizing the non-normal distributions that more often occur in forests today.

In Chapter 6, terminology for units of management reflect the author's close association with classical forestry. Structure of management personnel, on the other hand, is analysed more in relation to the present position in the British Forestry Commission than to traditional standards. Here occurs one of the two references to forestry in New Zealand but, unfortunately, Mr Osmaston's claim that a compartment in New Zealand implies also a unit of treatment is not necessarily true.

Chapter 7 gives a good account of what factors can affect the amount and development of the growing stock, and how subsequently these effects influence management of the forest. Some mensurationists would question the ready availability of sampling techniques capable of assessing stand parameters on the intensive scale that the author advocates to less than $\pm 5\%$; see also later on pages 271 and 272. There is no doubt that Mr Osmaston favours high sampling intensities, even 100% enumeration by d.b.h. wherever possible; sampling, seemingly, is condoned only because of cheapness. I hope few foresters share this viewpoint today.

Chapter 8 on yield regulation is devoted almost entirely to how empirical area methods or formulae such as von Mantel's, M  lard's, Brandis' and the like evolved. Seventy pages of text give the theory and worked examples of these, whereas the use of mathematical models and iterative solu-

tions on electronic computers is only mentioned in less than half a page. I question that a modern textbook purporting to examine yield regulation can afford this degree of imbalance.

The preparation of working plans is probably the most important chapter in the book. Mr Osmaston suggests a comprehensive format on traditional lines. The contents and layout are a matter of individual taste, but today, when the conflict between what is desirable and what is feasible is highlighted by faster and faster progress, guidance on priorities within the framework as a whole would have helped readers. Furthermore, there is serious contradiction here with developments in forest management outlined in the final chapter. Thus, it is axiomatic that, if computers revolutionize forest management (and Mr Osmaston recognizes this claim), there must be critical re-appraisal of working plan formats. In short, the forest manager of the future might well work with a computer terminal at his right hand, not a bulky written document, and he would interrogate and update these files of data by and on computer. The written plan would then become a short document containing a summary of the facts together with the constraints required by management that are written into the computer programs which operate the system.

I began the final chapter eagerly, but was sadly disillusioned long before the end. Treatment of the early history of forestry is misleading through neglect of soundly documented evidence; that of the last millenium is confined to England (not Britain), France, Germany and their near neighbours on the Continent. No mention is made of the rich history in Scandinavia, and Scots will deplore the absence to any reference to many pertinent developments north of the Tweed and in the Highlands in particular. One looks in vain, too, for a mention of the impact of silvicultural practices like Craib's on management of plantations, or management practices in Scandinavia, recent developments in North America, and so on.

This book is of historical interest to foresters in New Zealand, and is possibly a useful reference for undergraduate study because of its good discursive treatment of management principles.

A. G. D. WHYTE

GROWING TREES ON AUSTRALIAN FARMS, by Alan Brown and Norman Hall, 1968. Canberra, Commonwealth of Australia, Dept. of National Development, Forestry and Timber Bureau. xxvi, 397 pp.

The Australian Forestry and Timber Bureau is to be congratulated on producing this comprehensive work for the benefit of country folk interested in growing trees. To one of a group of farm foresters who have felt the need for such a book, its four hundred pages of closely-packed informative writing is overwhelming in its thoroughness, making it painfully clear that Big Brother across the Tasman has beaten us to the punch again — and so well!