

BOOK REVIEWS

FOREST MANAGEMENT by H. Arthur Meyer, Arthur B. Recknagel, Donald D. Stevenson and Donald A. Barton. 1961. Ronald Press Company, New York. 282 pp.

This is the second edition of a book originally published in 1952. The change from forest exploitation to sustained yield management has had a profound influence on forest regulation and management in the United States and this is reflected throughout the new edition.

As working foresters have participated in the preparation of this book, the approach to the problems of assessing the growing stock, regulating the yield and preparing management plans is extremely practical. The point is made on the first page of Part 1, that "sustained yield management must be flexible, with the expectation of increasing the cut as production increases and the markets are good". The degree of flexibility which can be achieved, without surrendering the ultimate objective of bringing the cutting of a forest reasonably close to the limitations of the allowable cut, is well illustrated by the prescription from a management plan for a New England forest. In this case, if a 20 year cutting interval is established, the allowable cut in any one year may be exceeded by up to 100%, in any five year period by 50%, and for a 10 to 15 year period a tolerance of 20% would be allowed. It is by this realistic approach to problems of forest management in relation to marketing, that the book makes such a valuable contribution.

Of the four parts into which the book is divided, those covering regulation and management are of the greatest value. Even-aged and uneven-aged forests are handled separately, and this simplifies the detailing of methods for calculating the yield and growing stock. The various methods of determining the allowable cut proceed logically from a simple basic formula, through the various classical growth and area methods or modifications of these methods, to more sophisticated formulae developed by the United States Forest Service. The yield for an upland oak forest is calculated by five of the methods described, which in addition to clarifying the descriptions, serves to illustrate the comparative accuracy of the various methods. The merits and limitations of each particular method are covered adequately, but the following section on management systems is very brief and could have been expanded with value to the reader.

The preparation of management plans and the control and revision of these plans is dealt with fairly briefly but there is a wealth of common sense packed into these pages. The whole approach is summed up in two sentences: "The management plan is a tool, designed to be used in the daily business of the forest to which it applies. It is useful to the extent that it is applied." Measured in these terms many New Zealand working plans could best be described as blunt tools, as they gather little but dust in some convenient filing cabinet.

The final section under management is titled "The Forest as a Business". Although much of this information is peculiar to United States forestry, particularly the chapters covering taxation and labour contracts, the general principles of sound business management apply equally well in New Zealand. To manage a production forest with great technical skill is insufficient if the product is not saleable or a reasonable profit is not realized from such sales.

In the appendix four management plans are given, each with an accompanying critique. These plans, particularly the ones covering the larger forests, require careful examination but they do serve to illustrate the type of plan the authors consider desirable.

This is a book which should be of value to any practising forester and is worthy of a prominent place in his library. It is extremely well written, being clear and concise, with the various sections following on logically one from another. The classical methods of forest management are not discarded; rather are they tailored to present day conditions where markets call the tune. The book could be improved by including a glossary of technical terms, particularly those not commonly used outside North America.

—G.M.O'N.

EXOTIC FOREST TREES IN THE BRITISH COMMONWEALTH
by R. J. Streets; edited by Sir H. G. Champion. 1962. Clarendon Press, Oxford. 750 pp. U.K. price 63s.

This book is a compilation of reports submitted to the Seventh Commonwealth Forestry Conference in 1957. It is designed as a revision of the original work on the subject, Troup's *Exotic Forest Trees in the British Empire* (1932).

The first 116 pages contain brief general descriptions of the natural forest, climate and soil, afforestation techniques and exotic species used in the reporting countries. The remainder is devoted to information on the performance of individual species. There is no detailed study of the factors which govern the introduction of exotic trees, but useful data on climate and soil are included when provided by the contributors.

A symposium such as this stands or falls by its participants. The compiler has generally been well served, especially so by excellent reports from South Africa, Australia, Southern Rhodesia, Malaya, Great Britain and New Zealand. All reports have been summarized, and partly paraphrased in the process, but a detailed examination of entries pertaining to New Zealand shows that nothing of high importance has been omitted. It seems therefore that the compilation has been efficiently done; careful attention has been paid to nomenclature, and proof-reading has been excellent. The result is a wealth of information on a huge variety of species, both tropical and temperate.

A liberal view has been taken of what is a forest tree. With entries on such trees as *Ginkgo*, *Jacaranda*, and *Metrosideros tomentosa*, there is something here for the arboriculturist as well as for the production and protection forester.

It is unfortunate that the compiler has seen fit to retain Hoppus feet for volumes in Britain and Hoppus super feet for some of the Australian data; true cubic feet are used elsewhere. There is a conversion table to cubic feet as an appendix but a work of this