REVIEWS


Not the least of the benefits which a country derives from being host to a Commonwealth Forestry Conference arises from the desire to provide its guests with information about its forests and trees in a digestible form. This book, which brings together for the first time data on the principal native and introduced tree species in New Zealand from numerous sources, some not easily accessible, must have been invaluable to delegates to the Seventh Commonwealth Forestry Conference and is equally useful to the local forestry practitioner, wood user, tree enthusiast or student.

Descriptions are given for 19 indigenous and 10 exotic species, those for the former being supported by maps showing their geographical distribution. The information on each species is presented as far as possible in a standardised form, both for the botanical and silvicultural attributes of the trees and the physical and mechanical properties of the timber. It is therefore easy to pick out from the text any particular item of information desired.

As more data becomes available in the future this book must necessarily be revised. When it is, consideration might be given to including tabular statements summarising figures for all species covered, for quick reference and comparisons. Such a statement would be especially useful for physical and strength properties. In some similar publications the properties of some well known timber have been taken as a standard and the properties of others expressed as percentages of that standard, a very convenient way of showing special qualities and deficiencies. Presentation in this form is suggested for a future revision.

—F.A.

SHELTERBELTS AND MICROCLIMATE. By J. M. Caborn, B.Sc., Ph.D., vii, 135 p., illus., tabs. London: H.M.S.O., 1957. (Forestry Commission Bulletin No. 29.) 17s. 6d.

The work is in three parts: Part 1 deals with evidence concerning shelter effects on agriculture yields and forestry practice, part 2 with research procedure into microclimatic effects of shelterbelts, and part 3 describes the author’s experiments and investigations and the relation of their work to shelterbelt practice in Great Britain.

This work will be welcomed by many foresters and agricultural advisers in New Zealand. Its 135 pages are packed with information and no effort has been spared in presenting the material in detail.
There are many figures, tables, photographs, and maps, and over 200 references.

Chapter 2 deals with the influence of shelter on factors of wind, temperature, humidity, water loss, and soil moisture, and needs careful reading to follow the meaning. A small but annoying defect is that figures relating to the text are not presented on the same page, while many of them are unnecessarily complicated and confusing. The practical man will find Chapter 4 most useful, summarising clearly the important points such as height, length, orientation, profile, and penetrability. It is interesting to read that on a small plains farm of 165 acres a mere 5% of the area devoted to shelterbelts will give adequate shelter. On the other hand, many people will disagree on the degree of penetrability. In this mild climate, draughts through even moderately open belts can be serious enough to cause stock ills; this must be true to an even greater extent in Britain. By trial and error, many New Zealand farmers have come to advocate dense hedges, up to 25 ft high, of clipped pine or cypress, and these approach the Danish ideal on a grand scale.

Anyone investigating problems connected with shelterbelts will find much that he needs to know in part 2, and with part 3 the author brings together useful information about equipment and techniques. The results of comprehensive wind-tunnel studies based on models indicate, as previously shown by Woodruff and Zing, how complicated the problem is. The model approach can only go so far in representing all the variables and results merely serve as a guide to further field studies.

Chapters 11 to 14 interpret and summarise a comprehensive work clearly and competently. Throughout, the author has maintained the high technical standard we have come to expect of the commission’s bulletins and his handling of a difficult subject is creditable.

—W.J.W.

**CONIFERS. SOUTH AFRICAN METHODS OF CULTIVATION.**


This is a pleasant, informative, and very readable book. One can go further than this and state that it will bear re-reading and that certain of its pages will act as reference material for information that is not readily available outside of South Africa and adjoining British protectorates. Such, for example, are the notes on the plantations in Swaziland and the forest enterprises sponsored by the Colonial Development Corporation. The reviewer, for one, learned with some surprise that American investors are putting money into enterprises such as these. The author is a very well known forester in Britain whose work in private forests in the south of England has been noteworthy for many years past. He visited South Africa in 1947 and states that on that visit the then young plantations were “the best he had ever seen”.

155