

The survey is an excellent accounting of our indigenous forest resources and we look forward with eagerness to following volumes dealing with the exotic forest resource, and with protection forests.

F.E.H.

EXOTIC FOREST TREES IN NEW ZEALAND. Statement prepared for the 7th British Commonwealth Forestry Conference, Australia and New Zealand, 1957, by G. C. Weston, B.Sc., M.A. (Oxon). Silviculturist, Forest Research Institute, Rotorua. 130 pp.

At the sixth British Commonwealth Forestry Conference, held in Canada in 1952, it was recommended that each Commonwealth country should arrange for the preparation of a detailed account of the use of exotic species in their particular country. The presentation of the information in a standardised form was aimed at, some eighteen headings for each species being included in the questionnaire.

The object was to obtain a critical assessment (wherever possible on the information available) of the value and future possibilities of exotic forest species which were "either grown as economic crops or being tried as potential economic crops". The replies were to be presented in published form to the Seventh Commonwealth Conference to be held in Australia and New Zealand in 1957.

The New Zealand Forest Service, and the author entrusted with the preparation of the Statement for New Zealand, are to be congratulated on an excellent piece of work. It is, undoubtedly, the outstanding publication on exotic forestry in New Zealand, and its one hundred and thirty pages are packed with useful, concise information.

The introductory chapter on Indigenous v. Exotic Species in New Zealand Forestry gives a very fair summary of the history and present position. Climate, soils and techniques of establishment are also dealt with in introductory chapters which compress a wealth of data into a few pages, although one might wish for greater emphasis on the damaging and limiting influence of winds—especially in a country where damaging gales may occur in any month of the year.

The range of species dealt with is extensive, and should satisfy even the most ardent exotic enthusiast. Every forester will have some quibble about a minor piece of information concerning one species or another, but the information collected has been adequately presented and the potentialities of each species fairly estimated. The reviewer would not agree with the statement, that for production forestry at higher altitudes, Corsican pine is to be preferred to ponderosa. Where snow damage is likely, ponderosa will produce a much better stand than Corsican, the latter species being also less wind-firm. In New Zealand stands of Corsican pine, the dominant trees also have a deplorable habit of producing a large proportion of forked stems.

Timber produced from 80 year old ponderosa, grown under hard climatic conditions at 1,300 feet elevation in the South Island, has proved of good quality, and the species should not be judged on the timber produced from young, quickly grown stands, located in the warmer, higher rainfall areas of the Dominion.

One would also question the statement on the "good form" of Douglas Fir. Undoubtedly, it has proved one of the most valuable of exotic species, but the large proportion of wavy stems in our stands compares unfavourably with second-growth in its native habitat. Lack of care in selection of parent trees for seed collection in past years may possibly be a factor.

In the chapter "Techniques of Establishment", it is stated that in the nursery "seasonal growth ceases about March", but this is the opposite to the behaviour of *Pinus radiata*, especially in the south, where growth—particularly of seedlings—is most active in April, May and June.

In assessing the yield of various species, reference is frequently made to thinnings yielding certain quantities of pulpwood sizes. Although the thinnings are certainly available, the statements might give the impression that these thinnings are actually being carried out and used for pulpwood purposes. Little progress has been made towards this goal, which to the silviculturist in New Zealand is so much to be desired for the efficient management of our exotic forests.

A special word of praise should be given to the eight photographic plates, but it should be borne in mind that they are of some of our best stands and do not represent average stand conditions for each of the species illustrated. It is unlikely that anyone will be misled by the typographical error giving the annual rainfall in feet on the table on "Climatic Data" on p. xix. Although the West Coast climate may have its critics, even the most hostile would hesitate to credit Hokitika with 110.4 feet per annum!

Although some of the information has been available, particularly in Forest Service publications, its collection in one volume, together with much other useful information, will be welcomed by all interested in forestry, both in New Zealand and overseas. It is to be hoped that such an important contribution to forestry in New Zealand will be made available for purchase to those who will regard it as a standard reference book on the subject.

M.R.S.