Growth Rate of Indigenous Species.

The Editor,
N.Z. Journal of Forestry.

Sir,

The Forest Experiment Station is endeavouring to ascertain the growth rates of indigenous tree species and is up against the old problem of deciding whether growth rings are annual or not.

The best and most obvious way to find out is to fell trees of known age and count the rings. Unfortunately such trees are hard to come by. If any of your readers know of any native trees whose age can be authenticated, I would be grateful to hear of them. If the trees cannot be felled, the opportunity would still be welcomed to take diameter and height measurements and, possibly, increment borings.

The Experiment Station is interested in all commercial tree species, but most particularly in *Beilschmiedia tawa*.

I am,

Yours faithfully,

A. P. THOMSON. Officer-in-Charge.

Rotorua.
6th January, 1948.

REVIEWS.

The Forest, Forestry and Man.—Published by the Empire Forestry Association, 1947. Distributors: Messrs. Simpkin, Marshall (1941) Ltd., Rossmore Court, London N.W.1. 68 pp., 33 illustrations, quarto. Price 4/-.

To quote from the Introduction of this brochure, which was published to coincide with the 1947 Empire Forestry Conference, "it is intended primarily for administrators, policitians and others interested in land use . . . . in the hope that a better knowledge of the historical background and of the scientific basis of forestry may assist them in appreciating the problems with which the forester is faced and the measures he considers necessary to solve them. Foresters will also be helped to see past mistakes in perspective and to recognise the direction in which technical progress lies."

Rarely if ever has a statement on the whole field of forestry (which is both intelligible and convincing to the layman, and of absorbing interest to the inexperienced—and experienced—forester) been so successfully compiled.

The method of presentation is to paint vividly in words two major pictures, the canvas of the first being the urgent need for a world forest policy, and that of the second, the application and development of such a policy based on forest practices "fully in conformity with biological laws."

The first picture is drawn in two chapters—"Wood" and "Man and the Forest"; the second in three chapters—"The Forest," "Forestry" and "The Future."

"Wood."—This chapter consists of a concise and remarkably succinct survey of the uses of wood; trends in the consumption of wood; effects of the second world war on supply and demand; world shortages and surpluses of wood.

Thus far no reference is made to the influence of man on that producer of wood—the forest.

"Man and the Forest" is a particularly challenging chapter in which three phases are distinguished—man the dependent, man the destroyer and man the creator.

As a development of the second, the true significance of soil conservation is briefly but judiciously explained. Under the subheading "Man the Creator" the authors prepare the reader for subsequent chapters, with reference to such foresters' conceptions as: "Creative activity in forestry is not a question of restoring the status quo in nature by attempting to reproduce the pattern of the original vegetation . . . . ; it is primarily a question of appreciating what a forest is and what can be done with it, either in existing or in new combinations of species and factors" ". . . . . but there are biological laws which must be obeyed and according to which the forest must be worked."—"These laws are learnt from the forest itself . . . ."

The chapter concludes with a plea for a better understanding of forestry in non-forestry circles, pointing out that "it is clearly part of the progressive forester's obligation to the forest, and indeed to his own interests, to mould the perspective of intelligent opinion. For in the end the forester will get the forest he deserves . . . . ."

The chapter entitled "The Forest" is an essential and admirable preface to the subsequent chapter which endeavours with considerable success to trace in a few paragraphs the history and relative progress of world forestry.

The paragraphs dealing with France, Germany, Eastern Europe and Scandinavia are of particular interest and value to students of forestry.

The 33 illustrations are of a high standard but suffer in technical interest from inadequate and, in at least one case, inaccurate captions. For example the plate facing p. 61 entitled "Afforestation with *Pinus radiata*—New Zealand" is a scene of Whakarewarewa State Forest showing larch, eucalypt and Corsican pine compartments, the sole representation of *Pinus radiata* being an almost invisible strip on the horizon.

The omission of the name of tree species depicted in several plates also seems to be unnecessary simplification.

"The Forest, Forestry and Man" should be read by every New Zealand forester, not excluding the younger generation who are seeking inspiration and a broad perspective in the relatively narrow confines of their apprenticeship.

T.C.B.

Decay of Timber and its Prevention.—By K. St. G. Cartwright and W. P. K. Findlay. H.M. Stationery Office, Kingsway, London, W.C.2, 1946. Price 12/6.

The review of a book on this subject by two such authorities as Cartwright and Findlay is a task which must be approached with seemly diffidence. Fortunately in such a review one is spared the impertinence of adverse criticism or the implied patronage of praise. Since this is intended mainly for the perusal of New Zealand foresters, attention will be directed to those parts which are primarily of forest importance.

The book consists of 294 pages and contains 14 chapters and an appendix ; there are 49 plates and 8 figures.

The introduction outlines the losses due to decay with an historical sketch and a world survey of existing research stations.

In Chapter I the causes of decay are discussed with sections on Mechanical Wear, Decomposition by Physical Agencies, Chemical Decomposition, Insect Attack and Fungal Decay. The last section gives, in a few words, a particularly clear account of the nature, classification and life history of fungi.

Chapter II dealing with technique and Chapter III on physiology may be passed over as, although of great value to a pathologist, they are too technical for the general forester.

Chapter IV deals with the effect of fungal decay on wood, of particular interest to foresters are the effects upon the physical properties such as density and strength, on the moisture relations, on the value for fuel and on the appearance.

Chapter V gives detailed accounts of the principal decays of standing trees in Great Britain. New Zealand foresters will find many of the same fungi doing identical damage in this country ; among these may be mentioned *Fomes annosus*, *Polyporus schweinitzii*, *Armillaria mellea* and *Stereum sanguinolentum*, all of which occur on kauri.

Chapter VI deals with the rots of broad-leaved trees, among those found also in this country are *Daldinia concentrica*, *Ganoderma applanatum*, *Collybia velutipes*, *Pleurotus ostreatus*, *Stereum frustulosum* and *Stereum purpureum*.