

BOOK REVIEWS

NEW ZEALAND FORESTRY. *N.Z. Forest Service Information Series No. 41*, 1964. Government Printer, Wellington. Price £1 10s 0d.

This volume, of 80 pages of typescript and 126 photos, is the most ambitious production to date in the Forest Service information series.

Its purpose, as stated in the foreword by the Minister of Forests, is to explain to New Zealanders how forestry has come to play a vital part in New Zealand's economy. It is thus directed at the interested but non-technical citizen, in whom it hopes to develop an appreciation of the contribution of the forest to our economic fabric, and a conception of the management of forests as a major and permanent form of land use. To portray an accurate and balanced picture of so broad a field in simple layman's language is a difficult task, whose achievement is to be measured by the reaction of the layman rather than that of the professional forester.

The volume is attractively prepared, and is definitely in the "gift book" category. One may expect that many copies will be sent overseas as illustrations of a facet of the New Zealand way of life. Over half the book is taken up with photos, mostly of recent date, and giving a very full range of current forestry activities, but including also a number of earlier date, to fit in with the historical treatment in the text. Several of these portray conditions which have completely disappeared from the contemporary scene, and have a nostalgic value for the older generation of foresters.

A criticism is that the excellent series on logging bears the section heading "Management of the Forests", which may give the layman a misleading impression.

The script covers the field of New Zealand forestry in nine chapters by way of a historical-descriptive approach. A dozen writers, all specialists, have contributed to the text so that, in spite of editorial consolidation, repetition exists in some places; while many foresters may feel that certain facets have been overlooked or inadequately treated.

The first four chapters are entitled, The forests and the people; The environment; Soils and land use; and Vegetation and land use. As the names imply, the two latter comprise approaches from different directions to the basic problem of land use. The presentation in each case is scholarly and meticulous, though perhaps a trifle technical for those unfamiliar with the New Zealand countryside. Here the duplicated approach is not necessarily a fault as the book will find readers who will follow one or the other more easily, depending on their personal experience.

The succeeding chapters cover the evolution of the forests, research, and training of staff. The chapter on evolution of forest policy gives in five short pages an accurate, balanced and objective sketch of the development of forestry from the earliest tree planting encouragement Acts to the Farm Forestry Act of 1962, and ends with a brief indication of the problems which lie ahead. The chapter on management of the forests maintains the same standard of accurate presentation in a highly compressed form.

It may be contended that treatment of several important facets is brief to the point of superficiality, but it must be remembered that the publication is aimed at the layman, not the professional. A more valid criticism is that it is so close to being technical in wording that few laymen will fully comprehend it, even with the help of the glossary of technical terms, unless they already have considerable knowledge of the forestry scene.

Those who persevere, however, will gain a balanced perspective of the overall picture which will enable them to give intelligent support to the aims of forestry in our developing national economy. If this result is achieved, the editor and his collaborators will have good grounds for satisfaction with their work.

However, no professional forester in New Zealand should neglect to read the book, merely on the grounds that it is aimed at the general public. As an up-to-date summary of the present position, it may well serve as a basis for a weighing of successes and failures, and a re-thinking of objectives. If we think the professional image it projects is inadequate, it is for us to remedy the deficiencies.

F.E.H.

VEGETATION AND HYDROLOGY by H. L. Penman, 1963. Tech. Commun. No. 53, Comm. Bur. of Soils, Harpenden. 124 pp. Price £1.

This work, which appeared in 1963, comes as a breath of fresh air in a field of investigation in which bias and circumstantial evidence have for too long held sway. Its virtue lies in the fact that the author is no man with a mission, but a physicist, whose association with agriculture has led him to enquire more deeply into the problems of water use by vegetation.

The book can be divided into two parts. In the first part, which contains the first six chapters, the author covers the fields of vegetation and rain, interception, infiltration runoff and erosion, evaporation, transpiration and evapotranspiration, water use, and evaporation at and between extremes of water supply. The use of theoretical meteorological arguments is kept to a minimum consistent with a clear understanding of the factors causing these phenomena, and much emphasis is placed on the presentation of factual material gleaned from a large number of experiments covering an impressive number of crops from a wide geographic range.

In the second part, and seventh chapter of the book, the author goes on to review, country by country, the various experiments which have been carried out on catchment areas since the initial experiments in the Emmmental in Switzerland in 1903. By his critical approach to much of this work, Penman helps put many of the findings in perspective. Findings are seldom accepted at face value—the adequacy of a raingauge network may be questioned, or the comparability of paired catchments queried. The effect of this is to encourage a more critical approach on the part of the reader, and to indicate that results are seldom as clear-cut as they seem.

In the preface, Penman suggests that in the coverage of the literature, on which he has relied heavily, he has probably missed