

do to change the practices described. The Service is in charge of most of the remaining forest and what happens to Westland in the future must depend largely on official policy and its implementation. The casual reader must wonder what he is supposed to do about it all; he must certainly be pardoned for wondering if Government is alive to the position. If "200 men could halt the destructive tide" which has devastated 200,000 acres and is adding 5,000 acres a year, it is a challenge to the Government to provide the finance *now* to employ those 200 men and get on with the job. It is a challenge also to the Government to provide such facilities, men, finance, and (if necessary) legislation as will ensure the practices of "strip felling" and "selective logging", the planting of exotics in suitable areas, and the reclamation of the stony wastes left by giant gold dredges.

The book gives due attention to the protection forests and the thin soils of the steep mountain sides, and the problems of noxious animals, especially opossum and red deer, are vividly described and illustrated.

The truly magnificent photographs are the work of Mr J. H. G. Johns, who produced them under pressure in a very short period. He has used the aeroplane in obtaining some striking effects. Reproduction is excellent. The text by Mr. C. G. R. Chavasse is admirably brief and lucid. Read alone it would probably appear rather emotional; in association with the relevant photographs it does not exaggerate. End pieces consist of large-scale maps of Westland showing in three colours, with a clarity no statistical tables could emulate, the proportions of farm land, production forest, and protection forest. The Government Printer must be warmly congratulated on the high quality of the production and binding. The reader constantly bewails the fact that no location for the photographs is given for so many landscapes, but apart from this minor complaint one can do nothing but commend the author and photographer for their graphic picture of "a magnificent area of unparalleled natural scenery combined with a valuable economic resource".

—L.McC.

DECAY OF TIMBER AND ITS PREVENTION. By K. St. G. CARTWRIGHT AND W.P.K. FINDLAY. 332p., 57 illus. London: H.M.S.O., 1958 (D.S.I.R. Forest Products Laboratory). £1.17s.6d.

Since the appearance in 1946 of the first edition of this book, there has been notable progress in development of improved preservatives, especially water-borne types, and in the diversity of their applications. The emphasis given in New Zealand to damage caused by insect borers has stimulated the growth of the preservation industry which is unique in that attention has been focused primarily upon immunisation of building timbers. While it is expected that the treatments will provide adequate protection against rot fungi in well-maintained, light timber-

framed buildings, the characteristic humid conditions in this country are very favourable to the establishment of decay in timber used for other purposes.

The new edition of Cartwright and Findlay is an up-to-date source of reference covering practical measures to be adopted to minimise deterioration due to decay fungi, and more technical descriptive matters. It has been revised to take account of new techniques for examination of infected wood, improved practices for minimising decay, and additional descriptive and diagnostic work on fungi affecting standing trees, logs and timber in storage, and timber in service. Of particular interest are those sections dealing with micro-fungi causing the so-called "soft rots" which have been studied intensively, especially at the Princes Risborough Laboratory, during recent years. These fungi tolerate high-moisture-content conditions and preservative retentions which inhibit growth of the usual decay fungi. Their importance was recognised first of all through premature failure of cooling-tower timbers. Protective measures applicable to board products deservedly receive some attention; misplaced confidence in combinations of durable synthetic resins and non-durable wood is all too common.

Finally it may be said that it is only scientists of the calibre of the two authors who could achieve the desirable combination of easy readability and well-balanced presentation of highly technical subject matter which this book provides. It should become widely used in New Zealand.

—J.S.R.

EXPERIMENTAL DESIGN AND ANALYSIS IN FOREST RESEARCH. By J. N. R. Jeffers. 172p. Stockholm: Almqvist and Wiksell, 1959.

The author, who is statistician for the British Forestry Commission, has written one of the very few books of this kind. It is more suitable for foresters studying statistics for the first time than for those who are more experienced in their use, but, both tiro and specialist will profit from looking into it.

The first chapter briefly describes and illustrates the common designs used to lay out plots in field trials. The methods used to analyse these designs are then dealt with at length. The rest of the book covers more ground than the title suggests. Methods of sampling, regression, covariance and tests of significance, ancillary to the main topic, are treated fully. The author has tried to help readers who have little mathematical background, or who lack calculating facilities, by the inclusion of some simpler, statistically correct, methods and many worked examples. As in any applied science, the technical validity of many concepts must be taken on trust, and this has been helped by