

BOOK REVIEWS

FOREST BIOMASS

T. Satoo

Edited by H. A. I. Madgwick

Martinus Nijhoff, The Hague. 1982. 152 pages. ISBN 90 247 2710 3.

In revising Professor Satoo's book, Dr Madgwick preserves and expands on original attempts by Japanese scientists to systematise forest biomass data. The six chapters of the book begin with definitions of primary production and forest biomass and proceed with their estimation. The results of biomass studies, primarily in Japan, are then presented in the light of physical principles which assist to systematise the wealth of data. The book continues with a chapter on growth allocation and concludes with a discussion of factors affecting production rates.

My reaction to the book is nicely summarised by the authors who, while demonstrating many useful inter-relationships between biomass components and various forest attributes, conclude that research effort should go beyond collecting biomass data and provide estimates of parameters known to be associated with productivity.

Researchers of forest biomass will find this book useful with its up-to-date treatment of commonly used prediction equations. Furthermore, modellers will find the book a useful source of data, particularly to establish limits on growth. However, the authors sidestep the issues of growth processes and controls, and appeal instead to growth analysis methods as a means to functionalise productivity.

P. N. Beets

VEGETATION MAP OF TONGARIRO NATIONAL PARK, NORTH ISLAND, NEW ZEALAND

by I. A. E. Atkinson

New Zealand Department of Scientific and Industrial Research, Wellington. 1981. 1 map + notes (27 pages). \$4.50.

The publication of the Vegetation Map of Tongariro National Park will be welcomed by those who already have a great love for the native vegetation and mountains and it will open the way for a new understanding in others. The young, especially, will find in the vegetation map and informative text a greater understanding and hence a greater pleasure in exploring the Tongariro National Park.

The booklet of notes gives sufficient information to allow visitors a better appreciation of the volcanic upheavals of the past and, arising from this, the legacy of an altered vegetational structure as now exists in many areas of the park. It also provides coverage of the other aspects that people like to know about – such as what

animals and birds inhabit the park. Here, however, it might have been better to have provided a bird list including both introduced and native birds. Introduced birds are listed on p. 7 while references to native birds and introduced birds are scattered throughout the text. A single list bringing all these together would have offered a more useful checklist as to what bird species one could expect to see.

The list of plant names could have been expanded. The plants listed on pp. 26–27 are just a selection and many of those mentioned in the text are not in the list.

The map itself is a fine production. The colour scheme has enough contrast to allow one to distinguish easily the differing vegetational complexes, the streams and roads are well defined, and the stream names are easily picked out. The map should be a boon to all park visitors and at \$4.50 is a very good buy.

R. M. J. McKenzie