

important as either technical or economic aspects of pasture improvements.

A stimulating chapter by A. S. Thomas on ecology and human influence raises some important issues for all those interested in studying climax vegetation as a standard against which we may compare other ecosystems. He elaborates the concept that the climax theory has slowed down progress in ecological understanding, and observes that many forest areas regarded as climaxes are proving to be nothing of the sort. The notion that climaxes exhibit the greatest diversity of species is challenged, and various ways in which man modifies ecosystems discussed. There is a revealing comparison of ten general descriptions of the same region written between 1863 and 1962, only two of which, one early and one late, are in recognisable agreement. Thomas concludes that 'careful records like those of early explorers could be used for the study of future changes. Such records would be in conformity with the true meaning of ecology – the study of living organisms and their relationships to their surroundings.'

THANE RINEY

**Plants of the World Vols I & II, The Higher Plants**, by H. C. D. de Wit. Thames & Hudson, 4 gns each.

**European Alpine Flowers in Colour**, by T. P. Barneby. Nelson 70s.

**Mountain Flowers in Colour**, by Anthony Huxley. Blandford, 30s.

Wild flowers offer a greater scope for superbly illustrated books than almost any other subject, and these three take full advantage of the opportunities. Mr de Wit's, originally published in the Netherlands in 1963, has evidently been specially adapted for British readers, with a paragraph about each family in Britain, either wild or in cultivation; and while these descriptions often read as if the author were better versed in books about wild flowers than about wild flowers in the field, they are certainly a useful feature. The plan is to discuss all the gymnosperms (conifers) and angiosperms (flowering plants) family by family, leaving the lower plants (ferns, fungi, mosses and lichens) to a third volume. The book is therefore valuable as a work of reference as well as for its fine colour and monochrome photographs.

The two books on alpine flowers complement each other admirably, and should both be in the baggage of all flower-loving visitors to the mountains of Europe, although only Mr Huxley's will slip easily into the pocket when you get there. Mr Barneby has taken all the 575 superb colour photographs himself, but he covers only the Alps, and is not fully comprehensive even there. Mr Huxley, on the other hand, has produced an indispensable *vade-mecum* describing all the flowering plants and ferns of the mountains of western Europe, from the Pyrenees to the Julian Alps and Scandinavia, illustrating over 1200 of them, 884 in colour. So while, if you can only buy one it must be Mr Huxley's, Mr Barneby supplements him so admirably that you might buy his book for your wife while you are about it.

RICHARD FITTER

**Handbook of New Guinea Birds**, by Austin L. Rand and E. Thomas Gilliard. Weidenfeld & Nicolson, £6 6s.

This is an excellent example of the modern type of handbook, as distinct from a field guide, condensing within one cover a great part of what is known about the birds of an area. A vast amount of information is packed into it, though one could wish that the short introductory chapter giving the geographical and climatic background, an account of the composition of the New Guinea avifauna, and a short summary of bird migration and breeding seasons in New Guinea, were a bit