

men and women; and especially for lecturers in health education in the training colleges for future teachers. Every individual passes through some teacher's hands at some time or other, and it is absolutely essential that all teachers, not just the scientific worker or the physical educationist, should know what part they can play towards inculcating habits, imparting information, fostering attitudes and responsibilities, and inspiring ideals for a balanced harmony in living. Thus the physical, mental, emotional and social aspects of health should be woven together for the individual within the community. To-day we are convinced that the immunization of babies and young children against diphtheria has reduced child mortality from diphtheria and lessened human suffering and sadness. Yet to-day there is a very great danger that parents are not going to practise the principle of diphtheria immunization for their children, because they do not appreciate the necessity for it or because they are apathetic. Hence the latest diphtheria poster "If—"; hence health education and its modern emphasis; hence the value of the book under review.

This book should be in the library of all teaching institutions—the training colleges for teachers and social workers, and the medical and nursing schools—because it is a book for educators, both lecturers and those students who are preparing themselves as widely as possible to be of use, example and inspiration to their future flocks. Some students and all teachers of health education should possess this book as a comprehensive reference book, while public libraries could well stock the book for members of the public and for those parents who will seek such information as it reliably gives.

Mr. Bibby has divided his book into two parts. The first part consists of eight readable chapters emphasizing sanely and in a manner fully approved by present-day pioneers what is really implied by health education to-day. It deals with aims, aspects, facts, media and with health education in the home, school, college and community. The second part consists of most valuable appendixes of schemes, curricula, syllabuses and programmes with a seasonable bias, together with a directory of health education organizations, useful statistics, recommendations for films, film strips, books and other media, all of which will be much appreciated by busy teachers and lecturers.

If we know whither we want to go, this excellent book will probably tell us the way from our present stage; if our aims are not really up to date, it will start us on the right road in health education.

P. M. TAYLOR

BOTANY OF THE SCOTTISH HIGHLANDS

Plant Life in the Scottish Highlands

Ecology and Adaptation to their Insect Visitors. By Alexander Edward Holden. Pp. xv+319+64 plates. (Edinburgh and London: Oliver and Boyd, Ltd., 1952.) 30s. net.

THOUGH the flora of the Scottish Highlands is comparatively poor as regards the number of species represented, this relative poverty is more than compensated by the interest and rarity of many plants which are not found elsewhere in Britain. The occurrence, distribution and affinities of the

local species present some of the most fascinating problems connected with the British flora, and a systematic account of Highland botany dealing authoritatively with all aspects is long overdue.

The title and price of the work now under review suggest that this subject has at last been adequately treated. The book will certainly whet the appetite of field botanists, nowadays a vigorous and knowledgeable body in Britain, who at some time or other must visit the Highlands of Scotland if they wish to see species not occurring elsewhere. But, to students of the British flora, it will be a great disappointment, and particularly to those who have enjoyed memorable days plant-hunting in the Scottish mountains, and exciting hours afterwards in identifying their specimens. The professional botanist, and many amateurs also, will find little, if anything, original in the author's observations; but, on the other hand, will have much to criticize. The informed reader with a knowledge of plants and their ways will be rather chary of accepting the author's invitation early in the first chapter to regard plants "as sentient beings with hopes and fears and ambitions much like our own". This teleological theme is not a promising approach to the study of the vegetation of the Highlands, and it sets the tone of the whole work, which can scarcely be regarded as a serious contribution to the study of Scottish botany. It is quite clear that modern advances in the taxonomy of the British flora and the recent exciting discoveries of new plants in the Highlands have completely escaped the author's notice.

No attempt is made to give a scientific appreciation of the alpine and other habitats mentioned, and their plant communities, and the ecologists will have to look elsewhere for a critical appraisal of the physical conditions which influence plant life in the Highlands. The author deals with the vegetation in a most arbitrary way by selecting various habitats and describing rather cursorily one or two typical species.

The book will not greatly assist a beginner in the identification of plants, and it is necessary to point out that the nomenclature and taxonomy are often widely at variance with modern concepts. The serious divergences are too numerous to deal with in detail, and it is unfortunate that there are so many misleading statements that the author's generalizations must be read with caution. Nor are the distributional data always reliable, and one or two confident statements certainly need modification. It is no longer true that *Saxifraga cernua* is confined in Britain to the broken schist near the summit of Ben Lawers (p. 18); *Pinguicula alpina* (p. 194) has been extinct (since the beginning of the century) at its only certain Scottish station; and *Eriocaulon septangulare* (p. 222) is much more widely spread in Ireland than indicated, and the localization of the plant in Scotland is only partially correct.

A small chapter of four pages is considered sufficient to deal with the important aspects of distribution and affinities of the flora. As a result of this severe compression the picture of the sequence of geological events and climatic changes which have influenced the plant life of the Highlands is confused, and, in several respects, unsupported by scientific evidence.

It is a pity that this book cannot be recommended as an acceptable work on the vegetation of the Scottish Highlands. The typography is excellent and a wide selection of magnificent monochrome photographs by Mr. R. M. Adam illustrate many of the species and their habitats. GEORGE TAYLOR