

nature should use a common scientific unit rather than encourage parochial local customs.

Some readers will wish to consult all information that is available, so that a surprising omission is a list of contributing reports and their authors.

A valuable work for all seekers of information on exotic introductions or comparative yields.

—H.V.H.

THE SOIL UNDER SHIFTING CULTIVATION by P. H. Nye and D. J. Greenland. 1960. Technical communication No. 51 of the Commonwealth Bureau of Soils, Harpenden. Commonwealth Agricultural Bureaux, 140 pp., 12 tables, 16 photos. U.K. price 20s.

This compact volume contains an expert account of soil fertility under the practice of shifting cultivation. The list of 340 references indicates the wealth of material drawn upon for this review and the authors have added much from their own research and experience.

Part I deals with the fallow period and discusses the range of fallows and soils, the amounts of nutrients in these, the nutrient cycle and the restoration of fertility under the fallow. Part II covers the cropping period and discusses the effect of clearing and burning and the decline in fertility under cropping. The significance of the whole practice of shifting cultivation is also considered briefly.

A large amount of quantitative data is contained in tables and text. Although most of this material is concerned with tropical soils, and in particular those of Africa, there is much of interest to foresters in temperate regions. New Zealand foresters concerned with the use of fire in the conversion of indigenous forest will find much valuable information in the chapters dealing with the effect on the soil of clearing and burning the moist evergreen forest.

Those with a general interest in land utilization should read this book. Soils influenced by shifting cultivation cover a vast area. The extent of the practice is impressively outlined by the facts that over 200 million people spread over 30% of the world's exploitable soils obtain the bulk of their food by this method. Shifting cultivation is not confined to the tropics and was practised in Western Europe up to the Middle Ages.

Although this account is addressed primarily to soil men, foresters should not find it too technical and the reader is greatly assisted by the concise summaries found at the end of many sections. The photographs are excellent.

The authors do not hesitate to criticize the findings of a 1957 FAO publication which categorically condemns the practice of shifting cultivation. The dangers and difficulties are appreciated but they remark that ". . . in the African tropics we have failed to introduce to the forest regions any method of staple food production superior to the system of natural fallowing used in shifting cultivation". In a later section they suggest that "in an ideally planned economy the forest lands would be left to produce timber or the perennial cash crops like cocoa and rubber for which they are so well suited. . . ."

—A.E.B.