GRASS PRODUCTIVITY. By André Voisin. Translated by Catharine T. M. Herriott. Philosophical Library, Inc., 13 East 40th St., New York 16, N. Y. 333 p. 1959. $15.00. Also available from Crosby Lockwood & Son, Ltd., London. 30s. ($7.00 approx.).

In Grass Productivity, André Voisin covers some principles of grass production and of livestock production and then develops his system of rational grazing through which he believes investigators and others could get, maximum grass and livestock production. Thus one of the attributes of Grass Productivity is that it brings together forage and animal production principles and practices just as a livestock farmer must do.

Rational grazing is the author’s major thesis. While this term is used somewhat confusingly at times to mean different things, in essence the author uses the term as meaning a logical or intelligent grazing and feeding program. This takes cognizance, first, of the rate of growth and regrowth of grass at different times and, second, of animal requirements for maintenance, production, and health. Increased per-acre production obtained is due largely to increased carrying capacity. The author deplores the general lack of forage research data collecting and reporting in terms of pounds of forage dry matter growth per acre per day under different conditions, which data would enable more exact and quantitative planning of size and number of paddocks used for rotation grazing management. He points out that many studies of system of grazing management ignore or do not adequately consider the effects of drastic changes in rate of forage growth, which may result in insufficient time allowed for maximum grass regrowth in slow-growth periods and possible harmful effects on the animals’ health from grazing too-tender grass.

The author gives some historical references to early grazing management reports or studies which probably will be entirely new to most American readers on the subject.

An early impression of an informed reader is that the author has selected the limited references given primarily to prove his points. The over-all question of rotational vs. continuous grazing can be taken as an example. Studies in various parts of the world indicate that under some conditions continuous or set-stock grazing may be as or even more productive than some system of rotational grazing, or that the advantages to rotational grazing may be much less (10% in Beltsville work) than the author believes is possible. If the author perchance is correct, it still does not mean that his system of rational grazing is suitable to many farms in the United States where economy of labor usage is becoming more and more important. Again, if the author perchance is correct, the ultimate extension of his idea in this country might logically result in harvesting forage mechanically and feeding as silage or dry forage. The author’s conclusion from cited research is sometimes misleading, and statements or conclusions cannot be interpreted literally or taken as a matter of actual fact—the reader must be armed with the book to check on the validity of statements made. Occasionally data is presented without any reference. Also, statements are sometimes taken as a basis for development of one thesis or another.

A generally good account is given of animal grazing habits and daily forage intake. However, the author emphasizes animal heredity as the predominating influence, which is at variance with findings in this country.

Most of the livestock presentation is on dairy animals; relatively little is given on beef or sheep. Also, much development and interpretation of material is based on European conditions that revolve around the grass tetany problems which are generally of minor importance in this country.

One must conclude that Grass Productivity is hardly suitable as a textbook and that it would have to be assigned or used discriminatingly even as a reference book. None-the-less, it is a deserving, a singular, and a much needed book. For the forage agronomist the author recapitulates principles of good grass production practices and also introduces him to the often unknown or incompletely understood problems in the utilization of grass by livestock. Textbooks on animal nutrition are concerned primarily with dry lot feeding and, as the author states, “devote only a few words, out of the length, to grazing, even though this is the beastly thing the animal needs the eight months out of twelve.” To grasslanders in general the book can be enlightening, intriguing, stimulating and interesting, even though parts of it are technically controversial. While the cost of the book is rather high, one new idea derived through reading it can be worth many times its cost.


Generations of foresters have used Graham’s “Forest Entomology” as text and reference source during their training and practice. In such a situation, a new text faces a difficult problem of acceptance. Anderson’s new book is planned and written along new and valuable lines. It deserves the attention of foresters and forest ecologists as a valuable addition to any library and a practical manual for identification of forest insects.

Professor Anderson’s book is divided into two sections. In the first, the scientific and technical background of forest entomology is outlined. In the second, the most important and representative species of forest insects are described.

The information contained in this book appears current and accurate. No important errors were detected in the course of reading, though some interpretations are open to argument. My feeling was that the chapters on morphology, systematics, and ecology were so limited by space considerations that some questions as to oversimplification could be raised. On the other hand, the coverage of surveys and a number of other topics in the planning of the book make up for slight coverage elsewhere. I do not feel that the book would be a complete text but the topics which would require further treatment are themselves the subjects of familiar texts.

The strongest parts of the book appear in the second section. Here, the author provides a very strong series of keys based on characters apparent in the field. With their aid, a field man with very modest entomological background may expect to make rough field identifications rapidly and with good accuracy. The keys are weak only in that technical names are not always given.

The book is extensively illustrated and elaborately indexed. The photographs are rather variable in quality and in consequence are not always of use. Literature citations are included in the text with the section to which they are relevant. A good deal of recent material is cited but the bibliographies might be of greater use to students if space limitations had permitted the use of complete citations with titles included.

Most of the few shortcomings of this book will be eliminated in future editions. Many teachers will find the present edition worthy of classroom use. Foresters and ecologists will find it the best recent field manual in this important field.—W. R. Henson, Yale School of Forestry.