Book Reviews

Grasslands of the Great Plains. Their nature and use. J. E. Weaver and F. W. Albertson. With special chapters by B. W. Allred and A. Heerwagen. Johnson, Lincoln, Neb., 1956. 385 pp. Illus. \$6.50.

With the exception of some 20-odd opening pages of general discussion, the reading of this companion volume to Weaver's North American Prairie [Sci. Monthly 80, 262 (1955)] is pretty much an inductive experience. The characteristics of more than a score of important plants are reviewed, the vegetation of western Kansas is described and followed through a climatic cycle, the process is repeated on a more regional basis, then conditions in some ten representative areas are examined, with a pause to consider the underground characters of more than 2 dozen significant plants. At the end is a chapter on nongrasses, emphasizing their valuable role.

If the indolent reader objects to this routine, let him remember that he is being expertly guided on a vicarious field trip. What he can learn at the price of a few days' concentration would otherwise have cost him long months of arduous exertion, physical and mental. Should he be one of those whose living is derived from the hazardous environment of the Great Plains, he will find much that is to his advantage to know, if he has the wisdom and restraint to use it. If his interest is mainly scientific, he will gain greatly in insight.

The vegetation of the Great Plains seems to have had its inception in the Miocene, some 20 million years ago. For this there is sound paleontological evidence, contravening the ideas of Sauer and others on the origin of grassland through fires set by primitive man.

The semiarid grasslands, we are reminded, represent the greatest expanse of grassland on the continent. Except for their plateau extension in the Southwest, they are practically coterminous with the Great Plains; hence, the title of this book. Lying west of the True Prairie, or as some would prefer to call it the (subhumid, tall-grass) Prairie proper, the more arid grasslands extend on west to the Rocky Mountains, and north from Texas into Canada.

For these latter, the authors, following Clements, propose the name "Mixed Prairie" rather than the older term "Short-Grass Plains," basing their action on the appearance of mid-grasses along with short grasses when conditions are favorable. Aside from the historical fact that Prairie as first seen and christened by the French was the subhumid tallgrass community, there is the indubitable presence of a transition belt of some 100 miles in width, composed of both tall and shorter grasses and lying between the subhumid and semiarid communities. Some workers would prefer to see the name "Mixed Prairie" reserved for this interzone.

An interesting question is also raised by the authors' virtual elimination of the short grass as a climax type in its own right. Granting that the mid-grasses flourish under protection and under favorable soil and moisture conditions, it could be urged that neither of these ideals was general and continuous under natural conditions. Generally speaking, the short grasses are southern in origin, the mid-grasses are northern, more vulnerable to grazing and drouth, both of which were normal to the environmental complex that, by and large, must have determined the point of climax equilibrium.

The significant fact, regardless of terminology, is the great natural diversity of species and ecological types, beautifully adjusted to one another and to the vicissitudes of climate and soil. With such a resilient and persistent character, ready when possible to move beyond the equilibrium level, or to take refuge below it if need be, small wonder that there are differences of opinion with respect to a suitable terminology.

This amazing vitality of the short- and mid-grass community, which it shares with the tall-grass prairie, seems to me to be the essential theme of the book, overwhelmingly demonstrated. It rests not only upon the variety of species present and their complementary relationships but upon genetic variation within the species. One is surprised, therefore, to find no mention of Olmsted's work on regional segregates in *Bouteloa* or of the recent study in Nebraska of physiological differences of different clones of

the same species growing in the same local community.

But if Weaver and Albertson have shown the recuperative power of grassland under normal adventures such as fire, drouth, and grazing by the natural fauna, they have shown with equal clarity how vulnerable it is to continued misuse by man. Even better they have shown that wise and moderate use is possible and, in the end, the most profitable course. Their demonstration of the maximum value of the natural grasslands for judicious grazing makes their book an important economic, no less than scientific document.

The late lamented Kirk Bryan was highly skeptical of the relation of overgrazing to erosion and was equally dubious of the claims made for the superior forage value of natural, especially climax, vegetation. A few weeks before his death he told me that he stood ready to change his mind anytime the evidence justified it. I am sorry not to have had a chance to discuss *Grasslands of the Great Plains* with him.

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Psychoanalysis and Psychotherapy. Developments in theory, technique, and training. Franz Alexander. Norton, New York, 1956. 299 pp. \$4.75.

Ten years ago, Alexander and his colleague, Thomas French, published (in Psychoanalytic Therapy) an account of the experimental modifications of methods of psychoanalytic treatment which they and their Chicago colleagues had been trying for more than 8 years. It immediately aroused a vigorous controversy in psychoanalytic circles, which has continued for some years. In the present book, Alexander restates his position, buttresses it, and answers his critics. One of the main criticisms has been that Alexander's type of treatment is psychotherapy, not psychoanalysis. This argument is discussed with a full awareness that it is a matter of definition, yet one that carries a heavy freight of implications for prestige, income, and professional identification. It raises knotty professional issues: distinguishing the various techniques of psychological treatment that are based on a psychoanalytic understanding of personality, determining their differential usefulness in various pathological conditions, and training psychiatric therapists to carry them out.

The book opens with a literary-historical essay on the plight of mankind and the role that psychoanalytic psychotherapy plays in it. Alexander then restates the Freudian theory of the treatment process, discussing his additions to