

complete and muddled as well. The clinician who is well informed with respect to the treatment of cancer will find the information contained here of little value, and the novice may be misled by the lack of balance and perspective. The publication of a monograph on cyclophosphamide with only passing reference to the effectiveness of related compounds does not do credit to those who organized the conference or to the company that supported it. Sir Ronald Bodley-Scott's closing statement seemed particularly relevant. "I will end with an unsolicited testimonial. One of our patients with chronic lymphatic leukemia did very well on cyclophosphamide. He was so pleased with the effects of this drug, he told us, that whenever his wife felt off-color, he gave her a tablet and it made her feel much better."

The book contains a complete bibliography, and the index refers to the text as well as to papers in the bibliography which are relevant to the topic.

DAVID A. KARNOFSKY
Division of Clinical Chemotherapy,
Sloan-Kettering Institute for Cancer
Research, New York

Behavior Studies

Imprinting and Early Learning. W. Sluckin. Aldine, Chicago, 1965. x + 147 pp. Illus. \$5.

In general, review articles (or books) fall into one of two categories: they may summarize the literature pertinent to a particular field with the object of presenting to the reader a reasonably complete picture of what has been done, and why, and by whom. Alternatively, a review may be highly selective, the author's intent being to consider only those articles that meet his own criteria for rigor and relevance. In the latter instance, the onus rests on the author to explicate and to justify those criteria. Apparently, reviews of the latter type win few friends. In any case, they are rarely written.

Sluckin's book clearly falls into the first category, and, given the limitations of such a treatment, he has done a first-class job. P. Gray's checklist of avian imprinting papers, [*Psychol. Rec.* 13, 445 (1963)], provides a fair measure of the thoroughness of Sluckin's coverage; and thorough it is. This is not to suggest that Sluckin has done no

more than prepare another checklist; the theoretical significance of each reference has been explored, and incompatibility in results dispassionately discussed. Indeed, the book's one feature that disappoints me is just this absence of a modicum of passion and fervor. Some of the many experiments Sluckin discusses do not measure up to his own professional standards: inadequate sample sizes, the absence of appropriate controls, improper statistical treatment—these shortcomings characterize some of the studies on imprinting he has cited. The field of behavior would not be ill served by an explicit recognition of the fact that some papers should be accorded more respect and treated more seriously than others; and that, in fact, a few should be ignored altogether.

My bias should be made clear: I would like to have a more critical assessment of the imprinting literature. It is thus hardly fair to criticize Sluckin for having followed what I personally judge to be only a second-best course. But I must emphasize that he has marked his trail well. The organization of the chapters of his book is both clear and reasonable; the discussions are pithy; the extrapolations and speculations insightful and intriguing; even his use of English is pleasing to eye and ear. In short, no one interested in imprinting, whether he is of the laity or has a professional commitment to behavior studies, will find this book a poor investment.

PETER H. KLOPPER
Department of Zoology,
Duke University

Plant Communities

Native Vegetation of Nebraska. J. E. Weaver. University of Nebraska Press, Lincoln, 1965. vi + 185 pp. Illus. \$4.75.

Thanks to our rapid increase in population and the largely indiscriminate spread of urban, industrial, and transport facilities, the time is not far distant when land-use capabilities must receive much more attention than they have enjoyed. Natural, that is presettlement, vegetation, integrating as it did the manifold factors of environment, is unexcelled as a guide to potential land use.

This slender volume presents the varied pattern of "native" plant com-

munities in a great state that extends eastward from the foothills of the Rockies, across semiarid to subhumid grasslands, and into the western margin of the deciduous forest region. For 50 years J. E. Weaver and his students in the Botany Department of the University of Nebraska have investigated the increasingly rare remnants of original vegetation, both above and below the ground line. They have also extended these studies to cultivated crops and range land.

The evident intent is to make more widely available material that has appeared in numerous technical publications, particularly two books—*North American Prairie and Grasslands of the Great Plains*. To this end many fine photographs, both of individual plants and representative communities, are included, as well as drawings taken from the author's distinguished studies of root systems.

Another device is the exclusive use of vernacular names for plant species. This will present no difficulty to those who have at hand the books just listed, or to students of range management, accustomed as they are to such terms as "needle-and-thread grass," "purple three-awn," and "muhly grass" (for members of the genus *Muhlenbergia*). In the absence of a glossary it may trouble botanists from other regions, while its utility in schools will rest largely with the teacher.

The key illustration in the book is based on Condra's map of the topography of Nebraska, showing a surprising number of regions and subregions in a state that many think of as monotonously uniform. Preceding this map is one of mean annual rainfall, ranging from 33 inches in the southeast to 15 inches in the extreme west. Evaporation is not shown, although its inverse relation to rainfall is mentioned.

If only the climatic gradient were involved, the picture would be one of a relatively simple movement from deciduous forest in the east, through tall grass prairie, a transition zone of mixed mid and short grasses, to short grass plains in the west. But relief, exposure or slope aspects, and soil conditions complicate the situation. Tongues of deciduous forest run westward along flood plains. Sandy soils, unless disturbed, permit outliers of more humid vegetation west of their normal limits. The foothill elevations of the northwest encourage the growth of Rocky Mountain conifers.