In addition to lakes and swamps, distinctions have been made between lowland and upland communities and transitions between. Nongrassy herbs (forbs) such as legumes and composites are important constituents, as well as a source of great interest and beauty in the native grasslands. All of this involves considerable detail in the presentation.

I am reluctant to offer suggestions in the face of this admirable effort to condense the studies of a lifetime. There are, however, two sources of economy in discussing complex and extensive areas of vegetation. One is the idea of succession to which Nebraskans have made a major contribution. The other is that of the continuum, developed by Curtis in his classical Wisconsin work. The importance of both of these theoretical constructs will be inferred by the professional reader. It would be interesting to see whether they might not have been of great help to the laity for whom the book is intended.

For various reasons, many useful books get lost in the shuffle. Raymond J. Pool's *Marching With the Grasses* (University of Nebraska Press, 1948) is perhaps not as well known as it should be. In it readers will find much of general interest regarding this indispensable group of plants.

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History of Experimental Psychology

Source Book in the History of Psychology. Richard J. Herrnstein and Edwin G. Boring, Eds. Harvard University Press, Cambridge, Mass., 1965. xvi + 636 pp. Illus. $12.50.

This is without any question the best, and perhaps the only really good, selection of primary material relevant to the history of experimental psychology. Psychology's historical documents are in very large proportion in languages other than English, and many of them have not been translated. Herrnstein and Boring have made their selection on the basis of importance rather than of availability in translation. The book consequently contains a good many new translations, and the principal translators, Mollie D. Boring and Don Cantor, should share with the editors the credit for an important job very well done.

Boring is the undisputed dean of psychological historians. Herrnstein is a younger Harvard colleague with an interest in what Boring has called "behavioristics." Together they have made an impressive selection.

There are 116 items, clustered under nine topical headings, all annotated and appropriately indexed, and every one of them of significance for the history of experimental psychology. A reviewer could easily carp about items that have been omitted. (Perhaps a second edition will include a few of these.)

I am delighted, almost to the point of exuberance, by the appearance in fresh translation of important items that have been buried in the archives. Examples are Köhler's discussion of isomorphism in the *Physische Gestalten*, which has previously never been translated, and Broca's report on the speech center, which most of us have cited but have never read. There are also important but infrequently consulted American items, such as Watson's original Manifesto (1913) and W. S. Small's classic study of the rat (1901), both of which have led a good many of us down blind alleys. (But shame on the Harvard professors for having represented Wellesley's Mary Calkins by one of her less exciting contributions! Miss Calkins deserves better of the historian.) William James is quoted liberally, as he should be, and William McDougall (also a Harvard professor) somewhat grudgingly; and James Ward (but not G. F. Stout) regains his proper place in history. Add to these some gems from Sechenov, the Müllers (G. E. as well as Johannes), La Mettrie, Ernst Mach, and a host of others and you have a book which will delight the scholar and remind the student that all good ideas were not born yesterday.

Boring has paid a proper tribute to E. B. Titchener, which probably does not please Herrnstein but which pleases me immensely.

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Radiation Effects

Actions chimiques et biologiques des Radiations. M. Haissinsky, Ed. Masson, Paris, 1965. 250 pp. Illus. F. 86.

This volume, the eighth of a series, contains three articles dealing with topics in the molecular physics of radiation effects. I think it useful to comment on them in an order reverse to their appearance in the book.

The longest of the three, and the one that deals most directly with chemical and biological effects of radiation, is an excellent review by S. Wexler, "Primary physical and chemical effects associated with emission of radiation in nuclear processes." For each of the practically important classes of nuclear transitions, Wexler first assembles a theoretical picture of the ensuing atomic and molecular rearrangements, then provides a summary of the relevant experiments. There is a great deal of information about specific organic and inorganic materials, but no explicit reference to biological material.

In the review article, "Attachement électronique en phase gazeuse," by Florence Fiquet-Fayard, *attachment* means the transition in which a free electron becomes bound. This field has been very active in recent years, for attachment is an important process in the physics of the upper atmosphere, a field of great importance to missile and space technology. A great deal of experimental information is assembled here, with fitting interpretive comment for finding one's way about in it. When a worker in radiation effects comes to think about the final disposition of free, or nearly free, electrons, as he will at some point in considering nearly any system, he may well find suggestive, and indeed normative, information in Fiquet-Fayard's review.

Finally, there is a short article (28 pp.) by Koichi Funabashi and John L. Magee. Though entitled "Dissociation processes in electronically excited molecules," it is really an essay in the theory of the interplay of migration of electronic excitation and molecular vibration in molecular aggregates. I am afraid that I find the treatment here unconvincing, and perhaps one detail will serve to illustrate my reservations: Early in the paper (p. 9) there is a basic error—the authors assume that matrix elements for vibrational