

# Book Reviews

• Readers' comments on reviews should be addressed to the Editor.

## Behavior

**THE FRIENDLY BEAST**, by Vitus B. Dröschner. Translated by Richard and Clara Winston. 1971. E. P. Dutton & Co., New York. 248 p. \$8.95.

Written by an internationally recognized scientific reporter and skillfully translated from the German by the Winstons, this book is a stimulating, up-to-date overview of recent research in vertebrate behavior and animal psychology. Nine chapters range widely over work that has aroused the interest of professional biologists and laymen alike: in perception, intelligence, invention, communication, social behavior, population regulation, and related topics. The evolutionary significance of some of the unusual findings in these areas is examined.

The material is presented at a level and in a manner reminiscent of popular articles on animal behavior appearing in *Scientific American*. Results of experiments and field observations are described accurately and honestly, but the author achieves a high degree of interest and color in his presentation by the way he weaves these reports together. Additionally, the reports are thoroughly documented: the references (cited as "source notes") comprise 12 pages immediately following the body of the text. Roughly half of the citations are to works in English and, hence, reasonably accessible to the American reader. Subject and author indexes are provided.

The book should have wide appeal and usefulness. It could serve advanced high school or college students as a highly provocative introduction to animal behavior, leading them into the extensive body of literature upon which the book is based. It could also be read for sheer pleasure and interest by the layman.

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**INTRODUCTION TO MODERN BEHAVIORISM**, by Howard Rachlin. 1970. W. H. Freeman & Co., San Francisco. 217 p. \$2.95 soft-back, \$6.00 hardback.

In the preface the author states that this book is intended as a supplement to standard textbooks in psychology. He further states that current books are usually weak in such topics as the history and the philosophy of behaviorism;

therefore he devotes approximately 55 pages at the outset of the book to these subjects. He moves from history and philosophy into a discussion of techniques.

Much of the book is devoted to comparisons of standard conditioning procedures, including some extant and extinct theories of positive and negative reinforcement. These discussions are lucid and reasonably well documented.

Some instructors may wish to use this book as a supplement to more general textbooks. They should be cautioned that this book is almost entirely devoid of a physiologic or neurologic base. Such a criticism could, however, be more a reflection of the standard practices of the discipline than a criticism of this book. At any rate, its value has more to do with the practice of description than with interpretation.

The book introduces quantification, but the serious reader will find himself consulting other sources for a working knowledge of this side of the subject.

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## Botany

**WEED CONTROL**, vol. 2. 1968. National Academy of Sciences, Washington, D.C. 471 p. \$8.00.

The preface's opening sentence reads, "This report examines the state of knowledge and practice in the field of weed control." Within the wide limits established by this criterion, the book lives up to its objective. There are excellent chapters on weed control by physical methods, biologic controls, habitat management, and chemical controls. About two-thirds of the book is concerned with herbicides. Descriptions of success with the various methods are carefully delimited and modestly presented. The style is clear but somewhat pedestrian. The volume is intended for persons who have some background in agriculture or botany, or both.

There are only limited references to societal aspects of weed control. In a passage on the operation of federal laws with respect to weed control, the following sentences appear: "The federal quarantine, however, classified witchweed as a parasitic plant that caused a dangerous disease to major

crops of the grass family. Thus, for purposes of the quarantine, witchweed was considered a disease rather than a weed. Quarantine could not be imposed for witchweed or any other plant as a weed under existing authority." There are also references to drift problems arising from herbicidal sprays and to the subsequent possibility of litigation.

The authors' viewpoint is best expressed in the statement, "Man's survival and standard of living depend on his manipulation of the environment to produce an ecologic situation favorable to the growth of crop plants" (p. 254). An unfortunate statement, made in 1965 in a report of a U. S. Senate committee, is repeated here: it flatly asserts no danger exists from the use of herbicides to wildlife or to human beings. Present decisions to ban the use of certain herbicides render this statement untenable now.

A reader desiring a report on the impact of herbicides on the environment will be disappointed. However, the volume is addressed to those interested in increased crop production.

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**MORPHOLOGY OF VASCULAR PLANTS**, by David W. Bierhorst. 1971. Macmillan Co., New York. 560 p. \$14.95.

This comprehensive textbook of plant morphology comes with more than 2,000 photographic illustrations, hundreds of line drawings and tables, a bibliography, and an index of the names of plants and subjects treated. It is written in an easy descriptive style without excess use of technical terminology. The fossil forms are referred to in their proper relation to extant plant groups. The information and ideas about evolutionary relationships, structure, development, and reproduction of vascular plants is sufficiently up-to-date to supersede previously written textbooks and reference volumes. With his thorough, modern treatment, Bierhorst has made an effective contribution to the study of plant morphology. Biologists will want to have the book for reference purposes, and it will make an excellent text for many botany courses.

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## Education

**TO IMPROVE LEARNING: AN EVALUATION OF INSTRUCTIONAL TECHNOLOGY**, by the Commission on Instructional Technology. 1970. R. R. Bowker Co., New York. 441 p. \$13.95.

The commission was established in response to title 3 of the Public Broad-