

Book Reviews

Behavior

BIOLOGY OF BEHAVIOR

by Donald M. Brown. 1981. Cambridge University Press (32 East 57th Street, New York 10020). 312 p. hardback and softback. Price not given.

This book will make an excellent text for upperclassmen and beginning graduates interested in the behavioral sciences. Teachers of individual research projects will also find this book a valuable reference.

The author's ethological approach covers a wide variety of animals including man. There is a special emphasis on domesticated animals and their past. An excellent blend of field studies and physiology provides an unusually clear picture for the reader. The many simple, yet meaningful, diagrams add greatly to the meaning and clarity of the text. There is much attention given to the sensory mechanisms and the priorities that affect the organism's behavior. Specific receptors to the many stimuli and the mechanisms of transmission and analysis are clearly explained. A clear pattern for actions based on factors such as hunger, hazards, social relations, reproduction, and energy conservation are clearly established.

The reader's interest is held high with the variety of examples made possible by the author's extensive search of the literature. The 40 pages of references alone makes this book a valuable addition to the teacher's bookshelf.

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Botany

THE AUDUBON SOCIETY FIELD GUIDE TO NORTH AMERICAN MUSHROOMS

by Gary Lincoff. 1981. Alfred A. Knopf, Inc. (201 E. 50th St., New York 10022). 926 p. \$12.50.

Emmett Wright is NABT's book review editor. Dr. Wright is Associate Professor of Science Education, and Director of the Science Teaching Center, at the University of Maryland. He also holds a joint appointment at the University's College of Agriculture in Environmental Science.

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Field guides for the identification of fungi have inundated natural history shelves of bookstores in recent years; however, none has been so revolutionary in design as *The Audubon Society Field Guide to North American Mushrooms* by Gary Lincoff. This guide distinguishes species on the basis of shape and color—two very conspicuous macroscopic features. Most other guides to the higher fungi published to date begin by a determination of the color of the spore print, a simple but time- and space-consuming process, and then follow a taxonomic classification scheme.

There are 762 generally excellent color photographs for the 703 described species, more than in most other field guides. The look-alikes are conveniently juxtaposed. The line drawings by Bunji Tagawa are superb. In addition to the common gilled and poroid forms, there are many crust-like and shelf-like species of the basidiomycetes, along with plenty of ascomycetes and myxomycetes represented. The book does not emphasize a particular region, but will be handy anywhere in North America.

There are some uncommon features in this book that enhance its usefulness. There is a minimum of technical jargon in the introductory pages. Each text photograph is labelled with a common rather than a scientific name. While

diehard amateur and professional mycologists may be aghast over this approach, it has the advantage of not scaring away would-be mycophiles. The text portion is very well organized and written; for each species there is a complete description followed by information on the edibility, seasonal appearance, habitat, known range and look-alikes, plus a variety of useful comments (including synonymous names).

The appendices include a diagnostic key to genera of gilled fungi based on the spore print and macroscopic features, a section on mushroom poisoning and on the mycophagy of wild edibles, and a glossary.

Two technical deterrents: the lack of indentations for the paragraphs, and the general lack of paragraphs. I also feel the book would have benefited by having a table which outlines the classification of fungi.

This is one of the better guides in this series, and is sure to become a valuable reference for introductory mycology courses and naturalists as well as a bible for the amateur mycologist.

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General Biology

BIOLOGY ALL AROUND YOU

by Delores E. Pressey. 1981. J. Weston Walsh, Publishers (Box 658, Portland, ME 04104). 24 posters. \$8.50.

"Keep trying and thank you for answering a call to fill a void." So could be written the review of the Pressey Poster Series recently released. The posters were produced to bring the "real world" uses of biology to the attention of the students viewing them. This attempt to relate textbook knowledge to real applications about which the student may be curious—or know nothing about—must be encouraged.

The format of the poster collection is to show one of the current areas of real-world biology, such as "Public Health Practices" or "Controlling Human Behavior" or "Contraception," then follow the visual material with a second poster containing questions for further study. The continuing inquiry questions are insight-promoting and offer promise of good library research assignments.

The academic group that could most benefit from this series is probably students in grades 8-12. Even the information in the enclosed teacher's manual is interesting and full of further references for inquiry. With all these good points going for the posters, it seems unfortunate to have to discuss a major flaw—but here goes.

Though the written information is excellent, the use of green, red, and white as the only colors on any of the posters is disappointing. The cartoon aspect of each poster is appealing—but why not brighten them up with a rainbow of colors? What one must finally conclude is that as an aid to library research, the posters serve a useful purpose; however, as a "visual stimulus" for further inquiry, they don't quite make it. I hope to see a later edition of these in full color. This would

remove all of my reservations concerning their full use as visual aids in my classes.

Dan Huffman
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Zoology

WHALES

by W. Nigel Bonner. 1981. Sterling Publishing Co. (Two Park Ave., New York, NY 10016). 278 p. \$24.95 hardback.

Bonner, not unlike a great whale, lumbers from shallow to deep. Information in fine print alternates between tedious and interesting reviews of the literature and personal accounts gained by years of living at or near whaling stations.

Much of the section on "Cetacea" classification, anatomy, and range should have been reduced to charts, especially since, in some cases, only one member of the species has been observed; but for those who need, or

want, the information is there.

Biologists who like to combine physical principles with biological processes will enjoy the explanation of hydrodynamics, heat loss, and spermacti density, and others will wonder whether shedding skin cells can reduce drag by lubricating the water.

Historians will find the rise and fall of the whaling industry of interest, others will yawn; ecologists may think the plea to "save the whales" is unlikely to reverse current policies.

The chapters on sensory abilities, intelligence, reproduction, and feeding habits will please instructors and students, and will furnish many fascinating and incredible facts about whales and dolphins.

The 80 line drawings serve their purpose well enough, and the 14 full-color photographs are not unique, but good. The book has an extensive bibliography and is part of the Blandford Mammal Series.

Some of *Whales* is for anybody, little is for everybody. It would be a useful addition to high school and college libraries.

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INDEX TO ADVERTISERS

Amarel Precision Instruments, Inc.	442
American Optical	Cover 2
Biology Media	436
Carolina Biological Supply Company	Cover 4
CEBCO Standard	Center
Damon Instructional Systems	399
Films Incorporated	426
Globe Book Company	392
International Film Bureau, Inc.	444
Jewel Industries, Inc.	433
Lane Science Equipment Co.	338
NABT	387,426
Charles E. Merrill Publishing Company	Cover 3
Prentice-Hall	389
Scott, Foresman and Company	391
Silver Burdett Company	430
Smithsonian Press	446
Triarch	445
Unitron Instruments, Inc.	390