# Book Reviews

Michael Emsley
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## AIDS

AIDS: WHAT DOES IT MEAN TO YOU?
by Margaret O. Hyde and Elizabeth H. Forsyth, M.D. Revised and expanded edition, 1987. Walker Co. (720 Fifth Ave. New York, NY 10019). 128 p., $12.95 trade, $13.85 reinforced.

The authors, Margaret Hyde and Elizabeth Forsyth, have written a very timely book. They devote nine chapters to discussing AIDS (Acquired Immune Deficiency Syndrome), a disease that has been labeled "The health threat of the century." Each chapter gives the reader supportive, illustrated statistics summarizing key components about AIDS and the effect it is having on target groups. The result is a book full of information readers need to know about AIDS.

Written for the lay person, several chapters warrant additional remarks. The second and third chapters are critical ones for the reader. They discuss AIDS from the perspective of known carriers. The plight of the men used as examples and the social stigma associated with AIDS becomes evident. The reader is able to identify with the carriers' guarded feelings and establish a personal, social response to situations that accompany this feared disease.

The fourth and seventh chapters are must reading to be better informed about the disease. There seems to be an epidemic of fear about associating with people who carry the AIDS virus. Through these chapters, which help sort fact and fiction, the fears that manifest from being uninformed are quelled.

The cause of AIDS, what it is like to have it and its future all are discussed in this short but information-laden book. Wherever AIDS education is taught, copies of this book should be available for use.

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## REPTILES

REPTILES-THEIR LATIN NAMES EXPLAINED
by A.F. Gotch. 1986. Blanford Press (Distributed in U.S. by Sterling Publishing Co. Inc., 2 Park Ave., New York, N.Y. 10016. 176 p. $24.95 hardback.

This small volume is the third in a series by the late A.F. Gotch; the preceding two dealt with explanations of the Latin names of mammals and birds. After some introductory chapters on scientific nomenclature and animal classification, including brief discussions of priority, homonyms, synonyms, tautonyms and similar topics, the author begins a survey of reptiles listing selected species and giving the Latin, Greek or other derivation of the name. Unfortunately, many North American forms are not included. The common name of the species *Lampropeltis getulius* is given as the milksnake rather than the king snake, so I think young American herpetologists who could benefit from this book might well be disappointed to find some of their favorites not included.

The objective of the book, to explain scientific names of reptiles, is a laudable one and is accomplished for those species included. A transliteration of the Greek alphabet, a bibliography, a glossary, a general index and indices of English and Latin names also are included.

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## SCIENCE

SCIENCE IN SCHOOLS
ed. by J. Brown, A. Cooper, T. Horton, F. Toates and D. Zeldin. 1986. Open University Press (242 Cherry St., Philadelphia, PA. 19106). 412 p. $21.00 softback.

This book is a collection of 32 articles about science and the teaching of science. All were previously published in journals or as chapters in books, and all but two are contemporary, having been originally published within the last 10 years. They represent the work of 29 different authors or groups of authors, all highly credible.

The articles are organized into six groups. Those in the first group, written by scientists and philosophers of science, are about what constitutes knowledge in science. The second set is about science's place in a technological society and includes the classical lecture *The Two Cultures*, by C.P. Snow. The third section includes articles that address questions about what is taught in schools under the label of science.

The articles in the fourth group argue that science continues to have a legitimate place in the curriculum, based on the history of science education, the purposes for teaching science and the interactions between science and society. The teaching of science is discussed in the fifth section. Articles in this set include implications for teaching from research on cognitive development and on alternate conceptions and conceptual change. This section also includes articles on personality and attitudes toward science and

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on girls in science classes. The last section of the book contains two articles—one on helping science teachers develop collegiality and one on the influence of teachers' attitudes on the success of curriculum innovations.

Each section begins with an overview and each article has an introduction, presumably written by the editors. As the articles are all by different authors, the style is necessarily irregular. Some articles are very short (three pages) while others are considerably longer. Most include bibliographies.

The articles for the book were collected as readings for a course in *Applied Studies in Curriculum and Teaching* at the Open University in England. The course is intended for persons concerned about science education in secondary schools. The British influence cannot be overlooked. It is evidenced by which authors are included and excluded from the book. The references are to British curriculum projects and the citations mainly from European journals. The section on science and curriculum reflects concerns of the British school system.

Reading this requires attention—it is not a book for a science teacher to curl up with on a gloomy day. It is also not a book for teachers to turn to if they are looking for a single, definitive answer to questions about why they should teach science and what they should teach. It is a book for the inquisitive science teacher troubled by "what" and "why" questions as well as "how-to" ones.

As a variety of points of view are presented with clarity, it is certainly for those who want to form their own opinions. The British influence does not lessen the value of the book, but helps readers expand their perspective.

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## ENERGY

ENERGY AND ECOLOGY
by David M. Gates. 1985. Sinauer Associates (Sunderland, MA 01375-0407). 377 p. $40.00 cloth, $25.00 paper.

This book deals with the environmental and ecological consequences of energy extraction, conversion, use and discharge. Readers will find numerous, clearly illustrated tables and figures which augment their understanding of the material presented.

The first three chapters are concerned with the ecological principles necessary for one to fully comprehend the interplay of energy extraction and use on various ecosystems. The remaining chapters detail each energy source and its impact on ecological systems, e.g. coal, solar, petroleum, electricity, nuclear power and alternative energy sources. The descriptions of the energy sources' various ecological impacts are truly excellent.

This book is intended for undergraduate students from all majors—not just science majors. It is designed as a "self-contained" book requiring no prerequisites. However, some background in mathematics and the natural sciences appears to be a necessity to readily comprehend the information presented. Essential mathematical statements and physics formulae are included in the text. These quantitative statements are explained well and are indeed important if one is to fully understand how ecosystems work and what implications resource depletion creates.

The book's organizational framework is outstanding. The text reads well, is interesting and is highly motivating. *Energy and Ecology* contains an extensive bibliography and is replete with current information regarding energy sources.

In summary, this book should prove extremely useful as a required text for undergraduate courses in environmental science, ecology and geoscience. If not used as a course textbook, it should serve as an excellent informational resource or supplement in such courses.

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## MAMMALS

THE NATURAL HISTORY OF LIVING MAMMALS
by William Voelker. 1986. Plexus Publishing, Inc. (143 Old Marlton Pike, Medford, NJ 08055). 324 p. $29.95 hardback.

There are approximately 4,100 species of living mammals classified by zoologists into 19 taxonomic orders. In an informal and entertaining style, William Voelker attempts to compare and contrast all the Mammalia in a mere 324 pages. It is not surprising, therefore, that this somewhat basic text is most appropriate for secondary school students and amateur adult naturalists.

The author guides the reader on an armchair journey through the Mammalia, order by order. At the book's conclusion, two appendices are found that seem out of place in a volume restricted to mammals: one lists the names of animal young (e.g. a young swan is a cygnet) and the other catalogs the names of animal groups (e.g. a group of gnats is a cloud). The references used are not cited within the body of the text, but a selected bibliography of 180 sources is included.

Voelker's style is both to educate and entertain. He attempts to answer many commonly asked animal questions (e.g. Why does an animal "play dead?") and to cite many dramatic animal abilities. Unfortunately, in places the "facts" are exaggerated and the book's educational value degenerates. For example, when discussing elephants, must he include that these animals snore while sleeping or that some males have gone on rampages during "hangovers?"

The most disappointing attribute of the book is its graphic design. The quality of many of the photographs is poor; some are out of focus and others are of decrepit, poorly preserved museum specimens. A range map is included for each Mammalian family, but sadly the same (6 cm-by-9 cm) world map is reproduced throughout the text. Thus, taxons with restricted geographical ranges are shown only as small specks.

In summary, I can assign this book only an "average" recommendation. While it contains many amusing anecdotes for lay persons and younger students, the text is not appropriate for college-level classes. The book will probably be of the most use to educators searching for examples of interesting mammal adaptations to motivate their biology students.

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