

SOCIAL IMPLICATIONS OF BIOLOGICAL EDUCATION

Edited by
Arnold B. Grobman

Teachers and students of life sciences are forced to consider the social implications of biology. The important issues can not be avoided and deserve a full and balanced discussion.

Recognizing this need, the National Association of Biology Teachers invited distinguished biologists to address themselves to a variety of social issues. The result has been a volume ideally suited as a resource for class discussion and as a reference for the teacher of either life sciences or humanities.

The volume includes chapters on the social implications of . . .

Medicine

by Michael and Lois DeBaKey

Behavior

by James V. McConnell

Genetics

by Bruce Wallace

Population

by Garrett Hardin

Evolution

by Claude A. Welch

Additional statements are given by Vincent Dethier, Martin Schein, Haven Kolb, David Denker, Lawrence Mann and others. This book is available now from the National Association of Biology Teachers for only \$1.95.

NABT

1420 N Street, N.W.
Washington, D. C. 20005

NABT 1420 N Street, N.W., Washington, D. C. 20005.

Please mail _____ copies of Social Implications of Biological Education at \$1.95 per copy.

Payment Enclosed Bill Me

Name _____

Address _____

City _____ State _____

Zip _____

navigation, circadian rhythms, memory, learning, bioluminescence, and bioelectricity. Interestingly written, accurately researched, and illustrated with line drawings, this book should be made available to secondary and college students. It prods the imagination as to the possibilities of tomorrow.

Robert D. Littlefield
Oxford Hills High School
South Paris, Maine

THE YEAR OF THE SEAL, by Victor B. Scheffer. 1970. Charles Scribner's Sons, New York. 216 pp. \$7.95.

Birth and death, perils of the sea, the forces of nature, and man himself are endless challenges in the life of the seal. The author, writing in the present tense, provides a delightful and often poignant account of the Alaskan fur seal in the Pribilof Islands and along the migratory route southward. Each episode unfolds vividly.

The principal character is Golden Seal, a female of peculiar coloration, who survives the harsh environment of land and sea while others of her species are not so fortunate. The story provides an accurate insight into the biologic adaptations of the seals, past and present research with marine mammals, and efforts to preserve these animals.

The beautiful illustrations and fast-moving narrative will give enjoyment to any animal-lover.

Elizabeth J. Davison
Swarthmore (Pa.) High School

For Young Readers

ANIMALS NEAR AND FAR, by Helen Hoover. 1970. Parents' Magazine Press, New York. 64 pp. \$4.50 (hardback).

The premise of this story, written for ages 4 to 8, is an imaginary vacation trip around the United States with stops along the way to study wild animals. Animals studied include the ring-necked pheasant, Baltimore oriole, wild turkey, manatee, whooping crane, wood rat, prairie dog, black-footed ferret, bison, mule deer, Hawaiian goose, Kodiak bear, and polar bear.

The story seems very contrived and uneven. Not enough information is given on any of the animals, and several statements are quite misleading; for example, manatees are described as being like huge, gray scaleless fish with no fins. This fish-image is not corrected throughout the section on manatees. Anthropomorphism—for example, prairie dogs sleep in their "bedrooms" for the night and young Baltimore orioles answer their mother's "where? where?" with "here-we-are-mama"—is characteristic of several of the stories.

The author does emphasize the need to preserve and protect animal life. The

sections on the whooping crane and the bison provide examples of how man nearly eradicated these animals and then made very serious efforts to save them. Children are cautioned that prairie dogs, the black-footed ferret, and polar bears are in danger of becoming extinct, so must be protected.

Jack E. Sherman
University of Colorado
Colorado Springs

WHAT WE FIND WHEN WE LOOK AT MOLDS, by William D. Gray. 1970. McGraw-Hill Book Co., New York. 40 pp. \$4.72 (hardback).

This brief book is designed to introduce primary-school children to a relatively unspectacular though ubiquitous division of the plant world. After describing the essential environment for growing molds, the author points out many common kinds and some of their uses. Children will be interested to learn of the molds found in and on foods, of the molds that sometimes live on our bodies (ringworm, athlete's foot), and of those that are helpful in curing disease (penicillin). There are no photographs, but the line drawings, by Howard Berelson, are strikingly authentic.

Several experiments are suggested, so that children may discover for themselves how molds grow. The experiment in which molds in a glass jar eventually convert leaves, fruit peelings, and other organic detritus into soil should awaken children's appreciation of molds as an invaluable agent for disposing of many of the waste products in this world.

Gray's style is appropriately simple. He achieves his purpose of providing material that beginning readers can understand—material that is interesting enough to whet their appetite for further investigation.

Ruth S. von Ahlefeldt
Hyde Park Elementary School
Pueblo, Colo.

LIQUIDS, by William Lumsden. 1970. John Day Co., New York. 48 pp. \$2.97.

It is not an easy task to explain the laws of physics simply and clearly enough that they can be understood by young children. Lumsden has undertaken to examine the properties of many different kinds of liquids and their actions under various conditions. His examples are common, everyday substances and experiences that are so taken for granted that they may have gone unobserved by the young reader until his attention is focused on a particular occurrence and the reasons for an action or reaction are analyzed. Temperatures at which various substances change from liquid to solid or to gas are tabulated, and methods of transporting and storing liquids from early times to the present are examined,

as well as such properties as buoyancy, density, viscosity and surface tension. A glossary is included; even so, an average elementary school child would probably find some of the concepts and vocabulary difficult to understand. However, the book is copiously illustrated with brightly colored sketches, diagrams, and pictures, and about half the book is eye-catching pictorial material that amplifies the verbal descriptions. I would recommend it as a reference book for elementary-school libraries.

Ruth S. von Ahlefeldt
Hyde Park Elementary School
Pueblo, Colo.

WONDERS OF THE WORLD OF WOLVES, by Jacquelyn Berrill. 1970. Dodd, Mead, & Co., New York. 80 pp. \$3.50 (hardback).

WONDERS OF THE FLY WORLD, by Sigmund A. Lavine. 1970. Dodd, Mead, & Co., New York. 64 pp. \$3.50 (hardback).

Jacquelyn Berrill and Sigmund A. Lavine are each responsible for nearly a dozen other titles in the publisher's impressive series for juvenile readers. Each author is primarily an educator—a writer, or interpreter—whose interest

is that of the generalist, not the specialist. Each has a talent for selecting the interesting and significant information, and each writes well. Berrill's book tells of a family of wolves, incorporating ecologic and behavioral information. She makes a strong case for protecting the wolf, now an endangered species. The 50 pleasing black-and-white drawings, by the author, add much to the book: two-directional talents are seldom found in such harmonious combination.

Lavine's book is about some remarkable flies. His is a topical treatment, highly readable and punctuated with 40 excellent close-up photographs. I can only suggest one possible improvement in both books: lists of further readings.

Juvenile readers, teachers in the elementary schools, and librarians will welcome these additions to the "Wonders" series—a series of about 50 titles on natural history of natural-science subjects. The 7-by-9½-inch size of these books and their sturdy bindings are ideal for use by eager young readers.

A. Gilbert Wright
Smithsonian Institution
Washington, D. C.

CLARION THE KILLDEER, by Helen Ross Russell. 1970. Hawthorn Books, New York. 66 pp. \$3.95 (hardback).

This is a warm, delightful story for young readers of a killdeer family and more especially of the life of Clarion, one of the offspring. Clarion is followed from the hatch through a return to the home territory a year later. There are strong ecologic and animal-behavior overtones throughout the book. Protective coloration, nesting, migration, predator-prey relationships, and territory formation are basic in the development of the story. It is most likely that the children who read the book will not recognize the ecologic significance of the natural happenings of the killdeer family. However, the story line itself is appealing, and while reading the book the children may begin to develop a sensitiveness to the relationship of an animal to its environment.

Although the author is guilty of some anthropomorphisms, this does not detract from the story. A teacher would find this book a pleasure to use for story hour.

Jack E. Sherman
University of Colorado
Colorado Springs

The National Association of **Biology Teachers**

1420 N STREET, N.W.
WASHINGTON, D. C. 20005

Dues of \$10.00 enclosed for one calendar year NABT membership and ABT subscription.

NAME _____
(PLEASE PRINT)

MAILING ADDRESS _____

CITY _____

STATE _____

ZIP _____

A New Laboratory Text

BIOINSTRUMENTATION — Experiments in Physiology

by Stephen G. Rudin, Tibor L. Foldvari
and Charles K. Levy

This new text for advanced biology laboratory courses deals with the use of modern electronic instrumentation for a wide range of laboratory investigations in general physiology and psychophysiology. Section I introduces the elements of electronic bioinstrumentation including basic operational theory of transducers, amplifiers, recorders, stimulators, electrodes, and how they interact to form a system for acquiring meaningful biological data. Section II covers the background for a series of open-ended laboratory investigations including nerve-muscle physiology, blood pressure, electrocardiogram, electroencephalogram, Galvanic Skin Response, eye movement and other biological phenomena.

Written in a manner easily understood by student and instructor alike. 110 pages, 27 photographs, 40 line drawings. \$5.50

**HARVARD
APPARATUS**

Dept. D-23, P.O. Box 24, Millis, Mass. 02054