

Book Reviews

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

Botany

COMMON WEEDS OF THE UNITED STATES, by Clyde F. Reed and Regina O. Hughes. 1971. U.S. Department of Agriculture handbook 366 (1970), reprinted by Dover Publications, New York. 463 p. \$4.50 (softback).

This volume considers 224 species (of some 1,775 species identified by the Weed Science Society). The treatment for each species is similar and includes a concise description in relatively simple terms. Maps showing the general distribution of the plants are included and are useful in determining places where each is of major economic importance. Perhaps the most significant aspect, however, is the line drawings on the page opposite the description and map: these are useful identification aids. The plants considered are arranged by families in the familiar Engler-Prantl sequence. A glossary and an index are included. Although there are no keys, secondary students and their teachers will find this volume a handy one for identifying many frequently encountered plants.

Rudy G. Koch
University of Wisconsin
Superior

FLOWERS OF THE CANYON COUNTRY, by Stanley L. Welsh. 1971. Brigham Young University Press, Provo, Utah. 51 p. Price not given.

This is a beautifully illustrated soft-back useful primarily to persons in the Four Corners region of Arizona, Colorado, New Mexico, and Utah. The book has no keys but has an index of common names. The plants are grouped according to floral color (white, pink, red, yellow, blue), as in herbarium displays in the national parks. Persons with deep taxonomic interest will not use this book.

The 100 photographs, by Bill Ratcliffe, are outstanding. It is unfortunate that some of the colors are not true to the written description; for example, both the white and the hairy evening primrose (also white) appear as blue. Placing of two species of a genus together would have been appropriate when color allowed.

The text tells much about the use of plants in medicine, for food, and in religious ceremony—information to be obtained elsewhere only by diligent searching.

This book may serve as an interest-catcher in general libraries but will be of greater value in schools and public libraries in the canyon country.

James A. McCleary
Northern Illinois University
DeKalb

Ecology

AIR POLLUTION; NOISE POLLUTION; WATER POLLUTION [three booklets], by C. W. Lavaroni, E. A. O'Donnell, and A. L. Lawrence. 1971. Addison-Wesley Publishing Co., Reading, Mass. 94 p. each. Prices not given.

These three self-contained, modular units, devoted to the social problems concerning air, noise, and water pollution, their technologic origins, and the need for applied scientific solutions, are written primarily for the junior high school. The format for each booklet is the same: (i) an introduction to pollution problems by observation of the local environment; (ii) an analysis of the physical and biologic factors involved in these problems; and (iii) an analysis of the social implications arising from these factors and the need for technologic solutions. In addition, one third of each booklet contains a compilation of student investigations illustrating the scientific principles discussed in the text. Most of the investigations are of a classical nature and require little specialized equipment. The significant contribution of these modules is their synthesis of socioscientific phenomena compiled from diverse sources that are not readily available to busy classroom teachers interested in teaching relevant material on environmental problems.

A. C. Haman
University of Northern Iowa
Cedar Falls

EVERYBODY'S ECOLOGY: A FIELD GUIDE TO PLEASURE AND PERCEPTION IN THE OUT-OF-DOORS, by Clay Schoenfeld. 1971. A. S. Barnes & Co., Cranbury, N.J. 316 p. \$7.95.

This nontechnical book about the environmental crisis has a comfortable yet urgent feeling about it. The author, an avid hunter and fisherman from the woods of Wisconsin, describes with deep understanding man's effect on the environment, primarily with reference to the use of land and water. The role of

politics and of land-developers, industrialists, outdoorsmen, conservationists, and other special-interest groups is carefully and imaginatively examined in a warm, conversational manner. The fact that ecology is everybody's concern is stressed through examination of the difficulties involved in maintaining a balance between man's needs and their ultimate effects on the environment.

The book is loosely divided into five parts. Part 1 outlines the basic concepts of ecology and their implications. A month-by-month ecologic tour follows; it is a potpourri of natural events and their effects on man as seen through poetry, politics, and personal anecdotes and observations. Part 2 discusses specific game animals and how they have survived the activities of man. Part 3 takes up the use of the outdoors for recreational purposes; biopolitics; and the back-to-the-land boom. Part 4 presents "Letters from Sammy the Squirrel, Lobbyist," a clever means of exploring the complexities of bureaucratic red tape, governmental disorganization, private-interest exploitation, law, money, public opinion, news media, and man's peculiar personality. Part 5 is a fine discussion of attitudes and approaches to ecologic problems.

W. Robert Stamper
Cheltenham High School
Wyncote, Pa.

ECOCIDE IN INDOCHINA: THE ECOLOGY OF WAR, ed. by Barry Weisberg. 1970. Canfield Press, San Francisco. 241 p. \$3.95.

Organizations of biology teachers are conservative by nature and tend to avoid issues like the war in Vietnam because of possible political overtones. Biology teachers have, however, been sensitized, as a result of their training, to the fragile fabric of life: destroy a part of this fabric and, we know, the garment of the biosphere is adversely affected. Whatever your views about the Vietnam war, this book brings together facts, articles, and photos about southeastern Asia that may haunt you—make you feel guilty and angry.

Ecocide is not a term one finds in textbooks. What is ecocide? It has been called the "willful destruction of the environment." It involves assault on a nation, its people, its resources, its culture, its biologic communities. This assault goes beyond one country and even one section of the world: all living

INSTANT OCEAN[®]

Puts Life Into Marine Studies

New 50 gallon culture system — Model CS-50

Bring biology, physiology, embryology, etc., studies to life in your classroom ... right from the sea. Instant Ocean Culture Systems and Instant Ocean Synthetic Sea Salts provide a truly controllable environment, supporting the most delicate marine organisms ... permitting complete life cycle studies.

This advanced design is made for teaching, laboratory, or display purposes. Just fill with water, add Instant Ocean Sea Salts, plug in, and add the animals. It's that simple! Instant Ocean Culture Systems are trouble free.

WRITE FOR DETAILS TODAY!

FREE with each Instant Ocean Culture System — Experiments Using Marine Animals by Dr. F. A. Diehl, et. al. A complete laboratory course using marine animals to show biological functions.



Aquarium Systems inc.

33208 Lakeland Blvd. • Eastlake, Ohio 44094 • Phone: 216/946-9180

things are interdependent, and therefore the destruction of the ecosystem of southeast Asia cannot be kept isolated. The real meaning of ecocide is unfolded in this little book.

That this is a timely book, meant to stir our consciences, is not in doubt. Yet even after the U.S. withdrawal this book will still be of great value in helping us to assess the effect of an ecocidal war.

Jack Fishleder
University of California
Berkeley

THE ANTARCTIC, by H. G. R. King. Arco Publishing Co., New York. 1970. 276 p. \$9.95.

As information officer of the Scott Polar Research Institute, of Cambridge, England, the author brings an updated viewpoint of the scientific and political significance of the Antarctic. The continent has been a place of mystery since its discovery, and the blending of historical and political aspects in a scientific book is refreshing. The signing of the historic, 12-nation Antarctic Treaty (1959) set aside territorial claims for the present and guaranteed the use of

Antarctica for peaceful purposes. This treaty brought cooperation between nations at work on major scientific problems; perhaps this can be extended to other parts of Spaceship Earth. The spectrum of topics is vast: from upper-atmosphere physics to plankton studies, and from the formation of ice and snow to the ways man has modified his personal environment to survive in a land of almost unimaginable severity.

The style is occasionally a bit heavy, but on the whole the book is very readable. (One might question the need for conversion tables for temperature and linear measurements in an otherwise modern book.) This is an exciting adventure story for the general reader and a source of historical and scientific data for the teacher or student. It is well illustrated with tables, line drawings, and a large collection of photographs (67 in color). Four appendices give the Antarctic Treaty, a list of stations operating in the Antarctic, the organization of Antarctic research, and a guide to further readings.

John E. Butler
Humboldt State College
Arcata, Calif.

OMEGA: MURDER OF THE ECOSYSTEM AND SUICIDE OF MAN, ed. by Paul K. Anderson. 1971. William C. Brown Co., Dubuque, Iowa. 447 p. \$5.95 (softback).

This anthology of environmental damage contains selections from poets and scientists. The authors are well known, the selections well written. They are so convincing as to leave the reader with a feeling of hopelessness for man's future. An uncritical reader may get the impression that man may as well give up now—that the human species will be unable to survive on earth for more than a few decades, whatever attempts are made to improve his condition.

Anderson introduces each chapter with facts about the topic and with questions that the selections may help to answer. Often these questions are answered by Anderson himself in his introductions. A list of acknowledgments gives sources from which selections are reprinted, but there is no identification of the source of the particular selection: I found it frustrating not to know whether a selection came from *Science* or *Saturday Review*. Some of the more technical selections include