

excellent reference lists. The authors include Stephen Crane, Samuel Taylor Coleridge, Paul Ehrlich, Elijah L. Jacobs, LaMont C. Cole, Aldous Huxley, Hugh H. Iltis, Edward Teller, René Dubos, Kingsley Davis, and Lynn White, Jr. The topics are historical, sociologic, scientific, and technologic.

Omega should be useful in colleges—although perhaps not popular, because of the feeling of hopelessness it engenders. In secondary schools it probably will have very limited usefulness. Readers need to be told that many of the authors represented here have written other pieces on the same subject, in which they *do* offer some hope for the future.

Jean E. Cooper
East High School
Cheyenne, Wyo.

NATURE STUDY FOR CONSERVATION, by John W. Brainerd. 1971. Macmillan Co., New York. 365 p. \$4.95.

This handbook for environmental education is sponsored by the American Nature Study Society. It is divided into three parts: concepts, techniques, and responsibilities. Brainerd goes into detail about the basic approaches to nature study; then he expands on such topics as minerals, animals, plants, time and energy, and place of study. The book includes many illustrations and diagrams to help the user in the field. It should help the young nature-lover to start off on the right foot, and it should serve the experienced biologist as a reminder and guide.

William R. Thaggard
R. W. Groves High School
Garden City, Ga.

AN EXPERIENCE WITH POPULATIONS, by Darrel Murray and James Bond. 1970. Addison-Wesley Publishing Co., Reading, Mass. 195 p. \$3.25.

This laboratory manual lives up to its goal of giving students an experience with populations. A quick thumb-through gives a good impression—there is a variety of topics and pedagogic techniques—but a more detailed study shows that the use of the material requires much long-range planning. In most exercises students gather their own data; however, some exercises require reading articles that contain the working data. Most of the materials, such as *Scientific American* offprints, are readily available, but some exercises need permission to duplicate articles unless one happens to have, for example, a dozen or so copies of *Ecology* vol. 142. It will be worth the effort: the experiences appear to develop understanding of the problems of populations and their concomitant, pollution. This topic is presented complete with ideas for action: reading

journals, joining citizen action groups, writing letters.

This manual should be effective in changing the attitudes of students; however, it requires careful study before use, because it is full of "in the laboratory see the (such and such)." It was not always clear to me what should be prepared for the student.

John E. Butler
Humboldt State College
Arcata, Calif.

POLLUTION, ed. by Robert S. Leisner and Edward J. Kormondy. 1971. Vol. 2 of *Foundations for today* series. William C. Brown Co., Dubuque, Iowa. 92 p. \$1.95 (softback).

This is part of a three-volume set. Vol. 1 is *Population and Food*; vol. 3, *Ecology*. All three volumes are anthologies of articles that have appeared in *BioScience* since January 1968. This volume covers pollution by pesticides, radioactivity, overpopulation, detergent enzymes, oil, and the overheating of air and water. Pertinent problems not covered in some detail include eutrophication (which is covered in *Ecology*), soil pollution (fertilizers, etc.), and "communication" (highways, airlines, power lines, etc.). Of course, the editors are limited to articles from *BioScience*; furthermore, all pollution subjects cannot possibly be covered in one short anthology. 10 of the 23 articles have to do with pesticides, and six of the 10 are concerned with DDT (especially the pros and cons of the fight to secure legislation to ban DDT in Wisconsin). Thus, while some subjects are scantily covered this important subject is unusually well treated.

The articles are concise, well written, informative, and, it seems, scientifically valid. I plan to use the three volumes in our environmental-sciences curriculum. I would recommend them to advanced high school students and to college students.

R. Roy Johnson
Prescott (Ariz.) College

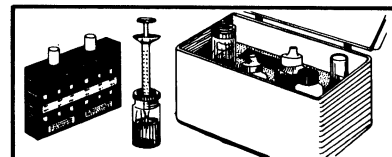
Genetics

ADVANCES IN HUMAN GENETICS, VOL. 2, ed. by H. Harris and K. Hirschhorn. 1971. Plenum Press, New York. 314 p. \$25.00.

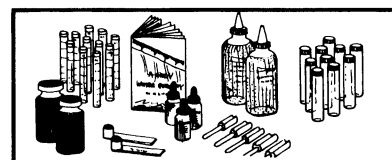
This book contains a series of review articles on important research in human genetics. The topics are glucose-6-phosphate-dehydrogenase, albinism, acatalysemia, chromosomes and abortion, and human cell culture. Each article provides a background of information in the history and methodology of the research and either implicitly or explicitly suggests directions for further research. There is an excellent, extensive bibli-

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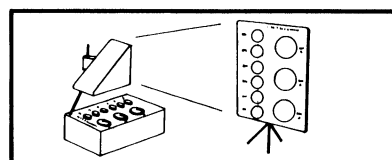
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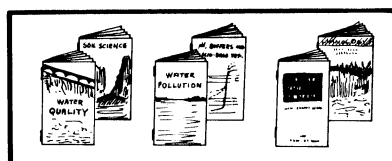
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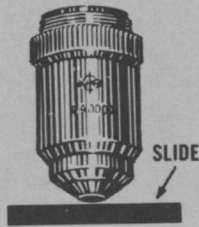
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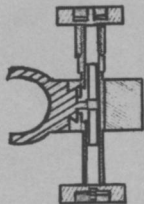
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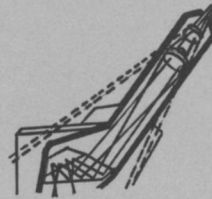
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ography at the end of each article.

This book—and the series—would be invaluable to an investigator in human heredity; to a physician who might come upon cases of the disorders discussed in the book; to a graduate student in genetics; and to a teacher of genetics. It has proved to be a source of enrichment for my own lectures in genetics. It could be used as outside reading for the undergraduate in genetics.

Margaret L. Watson
Simpson College
Indianola, Iowa

HUMAN HEREDITY AND BIRTH DEFECTS, by E. Peter Volpe. 1971. Bobbs-Merrill Co., New York. 166 p. \$6.95.

This timely book is a part of the Biological Sciences Curriculum Study "Science and Society" series for the layman. It succeeds admirably in meeting its basic objectives of being "short, highly readable and non-technical."

One-third of the beds in children's hospitals are occupied by patients with birth defects. Furthermore, birth defects are the third most common cause of death in the newborn. This book

emphasizes birth defects of obvious genetic origin—the best-understood defects. This orientation is well supported by discussions of human chromosomes, meiosis, and the nature and means of human inheritance.

Unfortunately omitted are several medical advances in the field of birth defects. Intrauterine transfusion of erythroblastotic fetuses in Rh disease is now a relatively common clinical procedure. Amniocentesis (sampling of amniotic fluid) is mentioned only in the context of sex determination; but there are now numerous clinical centers routinely performing amniocentesis in order to obtain fetal cells so that various birth defects, including mongolism and Tay-Sachs disease, may be predicted and prevented. Although several persons and foundations are justifiably mentioned for their contributions to the field, no mention is made of the National Foundation, once devoted to a successful fight against polio, whose considerable energies and talents today are aimed at the detection, prevention, and alleviation of birth defects.

Nevertheless, both teacher and student will find Dr. Volpe's brief book engrossing reading. It is warmly written and well illustrated; most important, it is *human*.

W. Ann Reynolds
University of Illinois
College of Medicine
Chicago

Human Biology

TEACHING ABOUT FAMILIES, by Hyman Rodman. 1970. Howard A. Doyle Publishing Co., Cambridge, Mass. 107 p. \$4.50.

This is a brief, interesting, and thought-provoking appraisal of what is taught about family life in the secondary schools of the United States. It is a refreshing book in that it not only criticizes but offers excellent suggestions for improving family-life courses and textbooks.

The book is divided into six chapters, an epilogue, and two appendices. The first chapter deals with the major goals of family-life education; namely, to teach about families and to promote individual and family well-being. It justifies the teaching of family life in school and discusses the joint responsibility of school, church, and home in family-life education. Family-life teachers are cautioned against the error of assuming that it is deviant not to marry and have children.

The second chapter—one of the most enlightening in the book—should cause the reader to become uncomfortable with the existing family-life textbooks. Rodman evaluates 11 of these, and he

(Continued on p. 108)