

relating the sciences of a period to the earlier periods and to the intellectual and cultural events of every period. With this came awareness that the dynamics of science, with its explosive qualities and rapid conversion to technology, poses problems to society as a whole.

Thus, the organizational rigidity of higher education is breaking down. Thanks to advanced placement, honors courses and honors colleges, elimination of prerequisites, serial-order dissolution, independent studies, and the like, a high school graduate can find institutions offering greater freedom in the pursuit of higher education. For example, one of the colleges in the study has inaugurated three one-semester courses, under the general title "Problems of Inquiry," in (i) the humanities, (ii) the social sciences, and (iii) the natural sciences. Another college identifies the ablest students early and allows free election of courses through much of the four-year program.

The most important single paragraph in the book (p. 131) is taken word for word, without credit, from an uncopyrighted paper by James G. Rice (in *The Basic Courses at Stephens: Revision and Projection*, Stephens College, Columbia, Mo., 1966, p. 113):

"Events of the last decade have forced on educators an acknowledgement of the tentativeness of all mere 'facts' and an awareness of their short life in the minds of students. Responses have been a new emphasis in the curriculum on 'learning to learn' and on the development in students of abilities and habits of continuous learning; and an emphasis on those outcomes which do endure in the learner: methods of inquiry, concepts, principles, processes, and the like. An older ideal of 'coverage' in curriculum construction has yielded to a search for 'representative' ideas, 'constructs' and experiences, and an awareness that 'content' chosen, however important in itself, is more important as a vehicle for fostering and developing these more significant and pervasive outcomes."

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ECOLOGY

THE WORLD'S A ZOO, by John Perry. 1969. Dodd, Mead & Co., New York. 300 pp. \$6.95.

The role of the zoo as it now exists and the role of the zoo as it could be are explored in this book, which is written in a compelling narrative style. The relationships between other animals and man are explored throughout. Early in the book it is pointed out that man is one of the endangered species, and this is discreetly but continuously emphasized.

The difficult task of capturing and maintaining animals is presented in a way that should make the reader more appreciative of the work of the zoo. The importance of zoos in the breeding and rearing of endangered species is presented, and the cooperation of zoologic societies around the world to protect endangered species in the wild is an important part of the book.

What makes this book a timely and important one to the high school teacher and student is the rational and realistic discussion of the human population explosion and world pollution problems—especially in the light of the rash of recent excitable literature on these topics.

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HUMAN BIOLOGY: CONTEMPORARY READINGS, by Cecil E. Johnson. 1970. Van Nostrand-Reinhold Co., New York. 248 pp. \$2.95 (softback).

Today the emphasis seems to be on man and his environment. What has man done to his world? What is the outlook for survival?

This book, written for use by the general biology student, presents some of the real problems of today, discussed in a straightforward manner. The book is easy to read, moves rapidly, and is not filled with tables and statistics. Any teacher wishing for a book that presents the problems of overpopulation, food shortage, and pollution should not hesitate to place this book in the hands of a student.

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POPULATION, RESOURCES, ENVIRONMENT, by Paul R. and Anne H. Ehrlich, 1970. W. H. Freeman & Co., San Francisco. 383 pp. \$8.95.

This is a disturbing book. It presents, for the first time, a comprehensive treatment of demographic, economic, social, and political problems as they relate to the environment and, ultimately, to the survival of man. One cannot read this work without coming to the full realization that we must control population size, minimize our impact on the environment, and greatly alter economic, social, and political behavior—right away—if we are to avoid consequences almost too frightening to contemplate.

The Ehrlichs have laid it on the line. The academic and professional communities as well as most of our long-entrenched institutions have been examined and found wanting. Every facet of the problem has been scrutinized, and the results and implications of such scrutiny are presented in a most straightforward manner. Extensive references and the bibliography indicate that considerable research

underlies the treatment of each subject discussed.

Perhaps the most thought-provoking thing about the book is that one soon realizes the alternatives are few, the time short, and the proposals for positive action so (admittedly) idealistic as to make the future appear rather bleak.

Everyone should read this book. Certainly every teacher should be aware of its contents and implications. It is a must for the biology teacher, whose obligation to student and profession demands special awareness. The Ehrlichs are not tiptoeing around—not talking about the preservation of a few birds and mammals or the elusive balance of nature. They are deadly serious in talking about man as the endangered species.

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READINGS IN POPULATION AND COMMUNITY ECOLOGY, ed. By William Hazen. 2nd ed., 1970. W. B. Saunders Co., Philadelphia. 430 pp. \$5.75.

This is a collection of 23 research papers, nearly all reproduced directly and in their entirety. The originals appeared in a wide variety of ecology journals between 1942 and 1967. The editor has clearly made an effort to include papers exhibiting an exceptionally broad scope: they range from 4 to 40 pages in length and include reviews, field and laboratory research reports, philosophic discussions, and controversial matters. Freshwater, soil, marine, forest, old-field, predator-prey, vertebrate, and invertebrate ecologies are all here. Several of the selections have already been reprinted in other collections—for example, papers by Deevey, Hutchinson, Cole, and Lindemann. The lively controversy over the "balance of nature," which recently appeared in the *American Naturalist*, is wisely included, representing the opinions of Hairston, Smith, Slobodkin, Ehrlich, and Birch.

The book's title is somewhat misleading, because almost all the contributions are in zoology; relatively little attention is devoted to plant ecology and general ecology.

The high school teacher who has had no formal course work in ecology or only a brief introductory course will not appreciate some of the contributions without careful reading and collateral study. Several selections are mathematically oriented and go beyond a limited college-mathematics background. On the other hand, the many basic ecologic concepts and techniques presented in this book will undoubtedly suggest simple corollary field and laboratory projects suitable for high school biology classes.

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