

Reviews

Ecology and Environmental Concerns

N.R.A. CONSERVATION YEAR-BOOK, ed. by Ruth Sievers. 1975. National Rifle Association of America (1600 Rhode Island Ave., Washington, D.C. 20036). 96 p. \$4.00 softback.

This publication should be of interest to everyone concerned with our natural wildlife and its conservation. It is a must for any college and high school library that has classes in conservation or ecology.

The yearbook contains very informative articles on the habitats and habits of the Alaskan caribou, the white-tail deer, the prairie chicken, the ring-necked pheasant, and others. Also included are extremely timely articles on strip mining, Mississippi floods, the Big Cypress Swamp fires, the future of the Badlands of the Dakotas, and the northern Great Plains. The illustrations are beautiful; many of the photographs are suitable for framing.

Without exception the authors of each report are well qualified in their fields. The bibliographies could be most helpful for further research. Perhaps most useful and of most educational value are the appendixes. They include lists of motion pictures dealing with conservation and natural resources, the U.S. and Canadian fish and game commissions, and the U.S. congressional committees and government agencies concerned with natural resources legislation.

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THE FUTURE: HUMAN ECOLOGY AND EDUCATION, by Edward A. Sullivan. 1975. ETC Publications (18512 Pierce Terrace, Homewood, Ill. 60430). 154 p. \$8.50 hardback.

This book's speculations on the educational applications of the findings of current mind-modifying research are "way, way out." Practicing extrasensory perception; developing alpha brain waves by biofeedback; and engaging in transcendental meditation may replace the three R's in the elementary school of the future, and from time to time, the pupils may take psychologically-induced "trips" without the aid of con-

sciousness-alerting drugs. If a student of the future happens to be a behavioral problem, his brain may be wired so the pleasure center can be electrically stimulated by remote control to pacify his fits of rage, or the pain area may be shocked as a method of negative reinforcement.

Unfortunately, I cannot give the author a passing grade on his discussion of genetic disease. Presentation of the technique of amniocentesis is vague and incomplete; lumping all genetic deformities caused by chromosomal defects as "mongolism" is misleading because several conditions distinct from Down's syndrome (mongolism) are caused by chromosomal aberrations; and the author's statement that "genes responsible for hemophilia are recessive and occur primarily in the male" is false.

I cannot find a justification for the inclusion of "human ecology" in the book's title, but the application of the word, ecology, has become so widespread and diffuse that it is apt to be used to denote many things today—in our town, the refuse collectors have become *ecology practitioners*.

The author of this little book seems to be trying to shock the readers in an Orwellian fashion but without the insight or inspiration of Orwell. The contents of the book should serve as good subject matter for conversation at cocktail parties.

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ENERGY AND THE FUTURE, by Milton A. Rothman. 1975. Franklin Watts, Inc. (730 Fifth Ave., New York 10019). 128 p. \$5.90 hardback.

The title is apt, for the author indeed defines and elucidates the concept of energy while exploring the future of our energy needs in an ecological context. The book is written for the concerned layman with little or no science background, but students (junior high or above) and biology teachers may find it interesting and profitable reading. As supplemental reading to acquire a better understanding of man's impact on the ecosystem by his ever increasing energy demands, it is excellent. The author describes with delightful clarity many things that biologists have gleaned only a hazy understanding of from their life sciences courses. He is thoroughly knowledgeable in the phys-

ical and chemical aspects of his subject and can be faulted biologically only for implying that the abiotic "burning" [sic] of carbohydrates is essentially the same process as occurs in organisms—namely the combination of oxygen with carbohydrate. However, considering the level for which the book was written, his oversimplification is probably more appropriate than an attempt to explain electron transfer and dehydrogenation oxidation.

The style is refreshing (for example, reference to the leafy tree branch as an antenna for reception of electromagnetic [visible light] energy, and his characterization of energy lost in transfers as "sidetracked").

Metrication enthusiasts may find his use of English units overly heavy although both metric (or SI) and English units are scattered throughout the book. The use of degrees Centigrade (rather than Celsius) and the positioning of mass number superscripts to the right rather than the left side of element symbols (as U^{238}) are trivial flaws usually noticed only by copy editors. One figure was labeled incorrectly, and minor improvements could have been made in several others. Since the author is a physicist, I was surprised that his discussion of energy conserving practices failed to mention either microwave cooking or the insulating of *already-built* homes.

Treatment of various energy sources is rather well balanced regarding their advantages and disadvantages; however, he makes no mention of the drawbacks that may be associated with hydroelectric dams.

All things considered, I regard the book as informative and pleasant to read, but a bit overpriced, probably because of its sturdy hardback binding.

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FIELDBOOK OF NATURAL HISTORY, by E. Laurence Palmer; revised by H. Seymour Fowler. 2nd ed. 1975. McGraw-Hill Book Co. (1221 Ave. of the Americas, New York 10020). 779 p. \$14.95.

This revision of Palmer's popular fieldbook has been a long time in coming, but the results are well worth the wait. Since the publication of the first edition in 1949, many changes have occurred within the disciplines treated in