

need to be simplified for use by the typical high school student.

Emmett L. Wright
University of Maryland
College Park

THE IMPERATIVE CALL: A NATURALIST'S QUEST IN TEMPERATE AND TROPICAL AMERICA

by Alexander F. Skutch. 1980. University Presses of Florida (15 N.W. 15th Street, Gainesville 32603). 331 p. \$20.

Alexander Skutch has been a naturalist all of his life, answering what he terms "the imperative call." His book is an autobiographical narrative of his naturalist studies in both temperate and tropical America.

Born in 1904, he grew up in Maryland and Maine where outdoor activities dominated his life. He attended Johns Hopkins University; and in 1928, he received a Ph.D. degree in botany. As part of his botanical studies, he was required to spend some time in the tropics. It started with a summer in Jamaica in 1926 and led to nearly 50 years of accumulated experiences in tropical America. Today he is recognized as an international expert in ornithology and tropical biology.

Skutch writes mostly of his years spent in tropical America (twenty out of twenty-four chapters), but he does include some temperate American biology. A most interesting chapter is on a canoe trip down the Ohio River.

This book would certainly be of interest to those fascinated by nature and stories of the tropics. I would recommend it as a book to be included in the nature section of high school and college libraries.

Gordon G. Snyder
Schoolcraft College
Livonia, Michigan

HUNDREDS OF IDEAS FOR OUTDOOR EDUCATION

by Russel E. Bachert, Jr., ed. 1979. The Interstate Printers and Publishers, Inc. (19-27 North Jackson Street, Danville, Illinois 61832.) 152 p. \$8.50.

As indicated by the title, this is an "idea bank" for outdoor educators, camp counselors, camp naturalists, museum directors, and others. Bachert is assistant professor, Outdoor Environmental Education director, Piney Lake Field Campus, The University of North Carolina at Greensboro.

Listed are over 600 general ideas for outdoor studies. These ideas are divided into 28 categories—Animal Life, Astronomy, Birds, Ecology, Geology, Indian Life, Marine Life, Outdoor Skills, Trees, Wildflowers, etc.

Here are several typical examples of ideas presented under the Animal Life category: Idea 10. *Mammals*. "Take a look at the mammals that now inhabit our area and learn which ones have vanished in the past." Idea 14. *Animals and Their Habits*. "This is a discussion of indigenous animals and their habits of living, illustrated with use of mounted specimens." Idea 19. *Who Lives Here?* "Explore the nooks and crannies on the trails to discover the hidden world of animal homes."

There are no diagrams, pictures, plans, bibliographies, or specific instructions to supplement the ideas. In the preface is this statement: "No attempt has been made to state the ideas presented here in consistent or formal style because of the varied grade levels, situations, and objectives to which they are directed."

Since the ideas in this book are so general and are directed to such a diverse group of potential users, it would seem that this publication will have limited value to high school and college biology teachers.

Arthur D. Meyer
Lakewood High School
Lakewood, Ohio

ENVIRONMENTAL IMPACT ANALYSIS HANDBOOK

by John G. Rau and David C. Wooten, eds. 1980. McGraw-Hill Book Company (1221 Avenue of the Americas, New York 10020). 656 p. \$36.50.

This comprehensive reference provides guidelines and techniques necessary to predict and evaluate the impact of land development projects on existing environments. Major areas of analysis include fiscal and socioeconomic conditions, air and water quality, the flora and fauna, energy use, and noise pollution.

The editors and contributors of the book present impressive credentials in the areas of environmental engineering and research. Rau has considerable experience working with local and federal government planning agencies.

A well-written introduction begins each chapter. Throughout the book, technical terms and statistical methods are clearly defined. Abundant practical examples and over 200 figures and tables provide specific tools for persons actively involved in environmental action or the

teaching of environmental awareness at the high school and college levels. For each chapter there is a list of references, generally complete through 1976 literature.

The disappointing aspects of the book are the shallow general index, the small-print text, which could be difficult for some readers, and the inadequate binding of the copy I received for review. I recommend this book for high school, college, and public libraries.

Michael I. Johnson
Nettleton High School
Jonesboro, Arkansas

ENVIRONMENTAL PROTECTION

by Emil T. Chanlett. 2nd ed., 1979. McGraw-Hill Book Company (1221 Avenue of the Americas, New York 10020). 585 p. \$23.50.

The book covers the human influence on water, air, land, and how these influences are reflected in the population's physiological and psychological responses. The interactions of biological pathogens, chemical, and physical agents are presented generally in the opening chapters and examined in more detail in later chapters. Water resources, air pollution, solid wastes, ionizing radiation, noise, and chemical carcinogens are covered in greater detail than in the first edition. Safety hazards and toxic compounds found in the workplace are investigated and discussed. Evidence of disease and risks are demonstrated through the author's use of animal model response data and epidemiologic studies. The author stresses that decisions made for controlling these problems based on sound evidence using the effect on the environment and humans as the standard. The book contains many tables and charts and is adequately referenced.

Chanlett has achieved in large measure what he attempted to do; that is, to develop a valuable introductory text for graduate students in environmental sciences and/or health. Each subject is well introduced and sufficiently detailed to provide a sound foundation for further study. The only complaint from students in our program at the University of Massachusetts/Amherst is that the prose was a bit dry and therefore, not very enjoyable to read for a prolonged time. However, most students agree that Chanlett's book will serve as a valuable resource long after their introductory course is completed.

Finally, this book, being the work of a single author, offers the continuity of writing style and subject matter so often lost in many recent edited volumes in-