

DOCUMENT RESUME

ED 092 461

SO 007 576

AUTHOR Sheaffer, Sheila J., Comp.
TITLE A Bibliography of Classic and Current Materials in Ecology and Environment.
INSTITUTION Wisconsin Univ., Madison. Center for Environmental Communications and Education Studies.
PUB DATE 26 Aug 70
NOTE 48p.

EDRS PRICE MF-\$0.75 HC-\$1.85 PLUS POSTAGE
DESCRIPTORS American Studies; Annotated Bibliographies; *Conservation Education; Depleted Resources; *Ecology; *Environmental Education; Food; *Futures (of Society); *Natural Resources; Pesticides; Pollution; Population Trends; Resource Allocations; Urban Environment; Wildlife Management; World Problems

ABSTRACT

This bibliography is intended for students and laymen who wish to gain information about environmental problems facing the world today and consists of more than 250 descriptive annotations of primarily nontechnical materials. Entries are listed once, alphabetically by author, in one of the following broad subject areas: General Books on Environment, Urban Environment, Ecology-Natural History, Pesticides and Pollution, The American Scene, Population and Food Production, Science and the Future, Conservation-General, Resource Management and Conservation, Wildlife, Journals, and Reference. An author index completes the bibliography.
(JH)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCEO EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE-
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

**CENTER FOR ENVIRONMENTAL COMMUNICATIONS
AND EDUCATION STUDIES**
The University of Wisconsin-Madison
Madison, Wisconsin 53706

MAY 28 1974

ED 092461

**A BIBLIOGRAPHY OF CLASSIC AND CURRENT
MATERIALS IN ECOLOGY AND ENVIRONMENT**

COMPILED BY

Sheila J. Sheaffer

UNDER THE DIRECTION OF

C. A. Schoenfeld

S0007576

**Center for Environmental Communications
and Education Studies**

602 State Street
The University of Wisconsin—Madison

PREFACE

It is hoped that this bibliography will be of help to both students and laymen who wish to gain information about the crucial and complex environmental problems facing the world today. The materials presented here are primarily books of a non-technical nature. Many of the books are illustrated; most of them are highly interesting as well as informative.

Items are arranged alphabetically by author within broad subject fields. Naturally many of these books cover more than one aspect of environment or ecology, however, it was necessary to limit the citation of titles to one time since the length of the list prohibits repetition. Included with each title is the purchase price; if the title is available in paperback edition this price is given rather than the hardbound.

Annotations are written from actually observing the book or from reviews in Book Review Digest. Since most of the annotations are descriptive rather than critical no distinction has been made between original and "borrowed" annotations.

My appreciation goes to Mrs. Emily Earley for her assistance with the list of journals provided at the end of the list, to Richard McCabe for his assistance in selecting titles, and to Professor Clay Schoenfeld for his direction of the project. No less important was the typing time contributed by Rosanne Koehler and Kristin Zweifel. My thanks to all of them.

Sheila J. Sheaffer

August 26, 1970

TABLE OF CONTENTS

	<u>Page No.</u>
GENERAL BOOKS ON ENVIRONMENT	1
URBAN ENVIRONMENT	4
ECOLOGY - NATURAL HISTORY	6
PESTICIDES AND POLLUTION	10
THE AMERICAN SCENE	15
POPULATION AND FOOD PRODUCTION	17
SCIENCE AND THE FUTURE	23
CONSERVATION - GENERAL	26
RESOURCE MANAGEMENT AND CONSERVATION	31
WILDLIFE	37
JOURNALS	41
REFERENCE	43

GENERAL BOOKS ON ENVIRONMENT

Beauty for America. Proceedings of the 1965 White House Conference on Natural Beauty. Washington, D. C., Government Printing Office, 1966. \$2.75 paperback.

Panel topics included: Parks and open spaces, water and waterfronts, the new suburbia, the farm landscape, and highways and related problems.

The crisis of survival, by the editors of The Progressive. Glenview, Illinois, Scott, Foresman and Co., 1970. \$1.50 paperback.

This is a collection of articles from a highly eminent group of writers. "The total presentation is designed to give Americans an authoritative survey of the crisis of the environment and to propose creative alternatives to those present policies leading us so exorably toward disaster."- from the preface.

Dasmann, Raymond F. Different kind of country. New York, Macmillan, 1968. \$5.95.

Dasmann presents an empassioned plea for diversity of environment through preservation of forests, swamps, deserts, etc. Never dull, the author often presents provocative views that cause the reader to reexamine his own seemingly valid views. Illustrations are an outstanding feature of the book.

Dasmann, Raymond F. The last horizon. New York, Macmillan, 1963. Out of print.

The story of the wild country around the world that still remains and how these areas are being encircled and degraded. Dasmann discusses the cost to nature of continuous population growth, and sees little room for individual freedom. Any alternatives to this depend on population control.

De Bell, Garrett, editor. The environmental handbook. (Prepared for the First National Environmental Teach-In, April 22, 1970) New York, Ballantine Books, 1970. 95¢ paperback.

This handbook focuses on some of the major problems of our deteriorating environment, explains the nature of ecology and-most importantly-suggests action that can be taken right now in any community, by any individual.

Douglas, William O. A wilderness bill of rights. Boston, Little, 1965. \$1.95 paperback.

Emphasis on "wilderness" as distinct from "out of doors." Describes status of U.S. wilderness preserves; proposes changes in law and public attitudes to enhance their status.

Dubos, Rene. So human an animal. New York, Scribner, 1968. \$2.25 paperback.

The author notes that human potential can be severely limited if the environment is not compatible. Where the environment ceases to be livable man's freedom is greatly reduced.

Helfrich, Harold W. The environmental crisis: man's struggle to live with himself. New Haven, Yale University Press, 1970. \$1.95 paperback.

An unusually engrossing collection of 12 talks by a group of authorities who unburden themselves of some pretty grim feelings and facts about "man's struggle to live with himself."

Herber, Louis. Our synthetic environment. New York, Knopf, 1962. \$4.95.

This book discusses the use of agricultural chemicals, food additives, antibiotics, lung cancer, pesticides, pollutants and the danger of radioactive fallout. The result is a theoretically sound, yet non-technical book.

Herfindahl, Orris C. and Allen V. Kneese. Quality of the environment; an economic approach to some problems in using land, water and air. Resources for the future. Baltimore, Johns Hopkins Press, 1965. \$2.00 paperback.

Central to this analysis of air, water, land and resource problems is the economic approach to the handling of such problems. More likely a deteriorating rather than a deficit of resources is in stock for Americans and their environments. This study involves the costs and other economic aspects of such deterioration.

Linton, Ron. Terracide; America's destruction of her living environment. Boston, Little, 1970. \$7.95.

Linton has put together a responsible survey of the American environmental scene--overcrowding, overpopulation, pollution, misuse of resources. It is an expanded summing up of his findings as head of HEW's Task Force on Environmental Health and Related Problems, from a few years back.

McClellan, Grant S., edited. Protecting our environment. New York, H. W. Wilson, 1970. \$4.00.

A highly readable volume containing excerpts from articles and addresses on the major threats to our environment. Specific and to the point, the articles focus on those agencies responsible for many of the problems and shows how little the government is doing to prevent it.

Rienow, Robert, and Train, Leonora. Moment in the sun. New York, Ballantine Books, 1967. 95¢ paperback.

This book focuses on some of the specific problems of American life and the deteriorating quality of the American environment. Pollution, population, and privacy are three prime topics. The authors have made their conservation bias clear; and hence, are not without criticism of their tone and presentation.

Russell, W. M. S. Man, nature, and history. New York, Natural History Press, 1967. \$6.95.

This volume is a survey of man's attempt to become independent of his natural environment by controlling it. The theme throughout is that man must work in harmony with nature. An interesting book for the student and lay reader.

Shepard, Paul, and McKinley, Daniel. The subversive science; essays toward an ecology of man. New York, Houghton Mifflin, 1969. \$5.95 paperback text ed.

This volume of 36 essays by well known scientists gives an excellent perspective on man and his environment and his relationship to nature---past, present, and future.

Smithsonian Institution. The fitness of man's environment: Smithsonian Annual II. By Robert McAdams and others. Washington, Smithsonian Press, 1968. \$5.95./ New York, Harper. \$1.60 paperback.

Twelve contributions on the theme that man can no longer afford to alter his environment without recognizing that environment is the dynamic sum of its interrelated parts.

A strategy for a livable environment. Report to the secretary of Health, Education, and Welfare by his Task Force on Environmental Health and Related Problems. Washington, D.C., Superintendent of Documents, Government Printing Office, 1967. 60¢ paperbound.

Task Force on Environmental Education and Youth Activities. Readings for the eco-activist; a bibliography of selected environmental publications of the executive branch of the federal government. Office of the Secretary of the Interior, Washington, D.C. Price presumably inexpensive.

An excellent, recent bibliography of governmental publications on environment and ecology. 33 pages long, the entries are annotated, priced and all purchasing information is included. Excellent starter bibliography of government publications, since all were chosen with an eye to availability.

Udall, Stewart L. 1976: Agenda for tomorrow. New York, Harcourt Brace and World, 1968. \$3.75.

In this volume, the former Secretary of the Interior presents a challenge to Americans to make a systematic rather than piecemeal attempt to solve the problems of the environment such as racial tension, dying cities, etc. The plan he suggests is "Project 76", a revitalizing scheme that would involve every citizen in our country's renewal.

Udall, Stewart L. The quiet crisis. New York, Holt, Rinehart and Winston, 1963. 95¢ paperback.

An excellent and inspiring introduction to the present problems of the American environment. The book is mainly retrospective, describing important men in the conservation movement, the successive stages of westward expansion with its accompanying waste and destruction, and concludes with an urgent plea to develop a more valid concept of the uses of America's resources.

If he is short on solutions it is because he so clearly understands the complexities of the problems.

URBAN ENVIRONMENT

Cleveland, Frederick N., et al. Congress and urban problems: a casebook on the legislative process. Washington, Avalon Press, 1969.

\$2.95 paperback.

Contents -- Legislative politics and water pollution, Congress and clean air, Congress copes with mass transit, legislating for urban areas, etc.

Cooley, Richard A. and Wandersforde-Smith, Geoffrey, editors. Congress and the environment. Seattle, University of Washington Press, 1970. \$8.95.

Consists of a series of seminars and the case studies resulting from them done at the University of Washington. Each chapter surveys a recent piece of legislation to determine how Congress has handled a particular environmental problem. Focusing on a variety of topics: water, noise, conservation, aircraft noise, etc.; each study outlines the problem, the nature of proposed legislation, modifications of legislation in the course of congressional decision making, strengths and weaknesses of the final legislative product, and the general ability of Congress to respond to the issues at hand.

Eckbo, Garrett. Urban landscape design. New York, McGraw Hill, 1964. \$16.50.

The author, a California landscape artist, expresses his philosophy on urban landscape and the elements of its design. There are sections on room and patio, buildings alone and in groups, parks, playgrounds, streets, neighborhood and region. Much practical advice included.

Faltermayer, E. Redoing America: a nationwide report on how to make our cities and suburbs livable. New York, Collier-Macmillan, 1968. \$1.95 paperback.

This is a general book -well received by critics- about the deteriorating quality of our cities and their physical environments. The author, assistant editor of Fortune magazine offers suggestions for improvement as well as an analysis of cause.

Herber, Louis. Crisis in our cities; death, disease, and the urban plague. Englewood Cliffs, N. J., Prentice Hall, 1965. \$5.95.

The hazards of water contamination and environmental stress are added to that of air pollution in this urgent challenge to a generally uninformed and unsuspecting public. A significant pioneering study of urban problems, with suggestions for possible long-range solutions.

Jacobs, Jane. The death and life of great American cities. New York, Vintage, 1961. \$1.95 paperback.

With wit, skillful writing, and an intense sympathy for the city as only a city-dweller might have, Miss Jacobs reveals her plans for urban design. Not merely surface structures, but small living, functional areas she suggests are what cities should be composed of. She states that areas should not be zoned for single uses, but should have home, shop, and recreation all within the neighborhood. Undoubtedly an important work.

Leinwand, Gerald, editor. The traffic jam. New York, Washington Square Press, 1969. 75¢ paperback.

An illustrated close-up of the maddening race to get in, around, and out of the city. Focuses on auto versus mass transportation, pros and cons of each, alternatives, and includes many good photographs showing the nature of the problem in the larger cities in the country. Easy to read.

Lindsay, John V. The city. New York, Norton, 1969. \$4.50 paperback.

In this volume by the well-known mayor of New York City, John Lindsay describes New York as it was, is and hopefully can be. He discusses the problems of crime, poverty, and welfare and believes that many old techniques are no longer useful in dealing with the contemporary urban scene. While not written with an "ecological slant", it would undoubtedly be of use to any student of today's cities.

McHarg, Ian. Design with nature. Garden City, New York, Natural History Press, 1969. \$19.95.

McHarg is a city and regional planner with an ecological outlook. He shows, how with intelligent planning, we can have living areas that are a joy rather than a disaster. Magnificantly illustrated with photos and maps, vividly written and much needed today. For student or general reader.

Mowbray, A. Q. Road to ruin. Philadelphia, Lippincott, 1969. \$5.95.

The author criticizes the building of highways in the U.S. and the destruction of natural resources by which it is frequently accompanied. He considers the government and private industry factors and demonstrates how the profits of the asphalt, trucking, and other industries affect government policy in road construction. Finally he makes a number of proposals directed toward improving the situation.

Mumford, Lewis. The urban prospect. New York, Harcourt, Brace and World, 1968. \$2.45 paperback.

The author states that the improvement in the cities will come through change of mind and way of life. He suggests that regional rather than merely urban planning is needed to save the cities.

Scientific American. Cities. edited by Dennis Flannigan. New York, A. A. Knopf, 1965. \$2.45 paperback.

This is an excellent book on the city as it is today. It explains the meaning of and reason for urbanization, discusses land use in cities, and decreasing housing. And does it all without laying blame. Of interest to any intelligent and concerned reader.

Whyte, William H. The last landscape. New York, Doubleday, 1967. \$6.95.

Whyte presents an almost heretical viewpoint in modern metropolitan planning. The crux of his argument is that density is the key to bettering urban conditions because (1) people do not mind being crowded if the environ-

ment is pleasant, and (2) more intense use can be made of city land by reclaiming what is being wasted.

Wilson, James Q. The metropolitan enigma; inquiries into the nature and dimensions of America's urban crisis. Cambridge, Harvard University Press, 1968. \$7.75.

A revised and expanded version of a book first published in 1966 by the Task Force on Economic Growth and Opportunity of the U.S. Chamber of Commerce. The twelve chapters by different contributors concern the distribution of urban jobs and industry, urban transportation, finance, housing, race and migration, crime, schools, rioting, poverty, pollution and urban beauty, with a final perspective provided by Wilson. Excellent.

ECOLOGY - NATURAL HISTORY

Bardach, John. Downstream: a natural history of the river from its source to the sea. New York, Grosset and Dunlap, 1966. \$2.95 paperback.

"Man's influence on the river environment, especially the new water conservation methods and the damaging effects of insecticides, detergents, atomic wastes, and other effluents that threaten this great resource is also evaluated."

Bates, Marston. The forest and the sea: a look at the economy of nature and the ecology of man. New York, Vintage, Random, 1960. \$1.65 paperback.

Marston Bates, renowned zoologist from the University of Michigan, provides in this volume an introduction to that complicated web of life we call environment. If the book is not "exciting" it is more than made up for by Mr. Bates' profound grasp of the biological and aesthetic aspects of life on this planet.

Bates, Marston. Man in nature. Englewood Cliffs, N. J., Prentice-Hall, 1961. \$1.75 paperback.

From an authoritative source, this short, concise biology text attempts to put man in biological perspective and develop his "ecological conscience".

Dasmann, Raymond F. Environmental conservation. 2nd ed., New York, Wiley, 1968. \$8.95.

An authoritative ecology text; its primary emphasis is on conservation and management of the landscape, however other related topics are not neglected. Good introduction to the field for the student or layman. Well illustrated, extensive references, index.

Dobzhansky, Theodosius. Mankind evolving; the evolution of the human species. New York, Bantam, 1962. \$1.65 paperback.

"This book has an especially contemporary appeal because among other things, it deals so illuminatingly with such immediate problems as racism, population increase, susceptibility to disease, stress, diet, intelligence and the like--all as factors in the process of man's continuing evolution."-New York Times Book Review.

Dubos, Rene. Man adapting. New York, Mentor, 1965. \$1.25 paperback.

Deals with all aspects of the individual's adaptation to his environment. It will serve as a basic text in social biology. Useful to the informed general reader.

Elton, Charles S. The ecology of invasions by animals and plants. New York, Barnes & Noble, 1958. \$5.00.

Elton is a pioneer ecologist of the highest standing; this book is a classic and fascinating reference, and most important, it is full of subtle and implicit commentary on man's relation to nature.

Evans, Howard E. Life on a little-known planet. New York, Dutton, 1968. \$7.95.

"Evans, a skilled writer in the unlikely guise of a Howard University entomologist has the wit and charm to make us care about the lifestyles of locusts and bedbugs. Evans is pleading for a greater understanding of earth life--even unto the smallest bug. Seldom has the case for the natural sciences--and for conservation--been presented with such reasoned, convincing eloquence."-New York Times Book Review.

Farb, Peter. Ecology. Time, New York, 1963. \$6.60.

A good introductory volume. Text and illustrations well coordinated. Under the flowing text explaining the nature of biological interrelationships there is a strong conservation attitude.

Farb, Peter. Face of North America: the natural history of a continent. New York, Harper and Row, 1963. \$1.95 paperback.

Beginning with the origins of the North American continent, Farb discusses the ecology of various types of ecosystems from the ocean to the mountain peaks. This book is a lucid commentary on what man is doing to change the face of North America.

Hardin, Garrett. Nature and man's fate. New York, Mentor, 1959. 95¢ paperback.

A University of California biologist outlines the development of evolutionary theory since Darwin. Provocative and controversial, he presents both sides of many timely issues. Many of our illusions are shattered in the process.

Hocking, B. Biology or oblivion; lessons from the ultimate science. Cambridge, Mass., Schenkman, 1966. \$1.95 paperback.

This book merits the attention of student, teacher and layman. It is interesting, interdisciplinary, scholarly, challenging and witty. But it is also deadly serious in dealing with the origins of life, genetics, evolution, ecology, and the future.--Choice.

Kormondy, Edward J. Concepts of ecology. Englewood Cliffs, Prentice-Hall, 1969. \$2.95 paperback.

A general treatise on ecology covering such fields as ecology of populations, energy flow in ecosystems, ecology and man, etc. Designed by author for post general-biology students. Minimal use of jargon makes it useful for intelligent lay reader. Well illustrated with maps and charts. Chapter bibliographies, index.

Kormondy, Edward J., edited. Readings in ecology. Englewood Cliffs, N. J., Prentice-Hall, 1965. \$4.95 paperback.

Papers important in the field of ecology, selected for their quality, diversity and ability to stimulate further enquiry. Papers are abridged and citations to the literature are omitted. No index.

Krutch, Joseph Wood. The great chain of life. New York, Pyramid, 1957. 75¢ paperback.

A beautifully written book covering the whole spectrum of life. Many basic questions about conservation are raised ranging from theories of Darwin to underdeveloped potentials of life as this noted author envisions them.

Lowenthal, D. George Perkins Marsh, versatile Vermonter. New York, Columbia University Press, 1958. \$7.50.

Lawyer, editor, farmer, manufacturer, politician, diplomat and naturalist--so describes George Perkins Marsh, a giant figure in American history. He was the first American to study comprehensively man's role in modifying his own environment and point towards an intelligent husbanding of resources. A fascinating figure. Bibliography, index.

Milne, Lorus and Margery. The balance of nature. New York, A. A. Knopf, 1960. \$5.95.

Well received by critics, this is one of the outstanding books in the effort to bring about greater ecological awareness. The authors draw examples from all over the world showing how the introduction of forces to combat one hazard may upset the balance of nature.

Morris, Desmond. The naked ape; a zoologist's study of the human animal. New York, Dell, 1967. 95¢ paperback.

The author attempts to startle and dismay the reader by introducing some new and challenging ideas about his evolution, biological temperament, and physical appearance. This is a very speculative account intended to make man

look at himself as a biological creature within the framework of nature--not outside of it.

Odum, Eugene. Ecology. New York, Holt, Rinehart and Winston, 1963. \$3.25.

A short introduction to ecology for the student and layman. Throughout stresses man's influence both in and on ecological systems. Written on an easier level than author's Fundamentals of Ecology.

Odum, Eugene. Fundamentals of ecology. 2nd ed., Philadelphia, Saunders, 1959. \$8.50.

A significant and basic college-level text in ecology. Broken down into 3 divisions--basic principles and concepts, the habitat approach, and applied ecology.

Sears, Paul B. The living landscape. New York, Basic Books, 1966. \$4.95.

Written by the professor emeritus of conservation at Yale University, the author's breadth of knowledge allows him to make innumerable comparisons not found in other works. A good ecology book for the undergraduate, Sears deals with the history of ecology, its present state, and its relation to other sciences.

Sears, Paul B. Where there is life. New York, Dell, 1962. 50¢ paperback.

Written for the general reader and student, this is an introduction to the man/environment relationship. Mr. Sears explores the historical as well as present aspects. Small size and low cost make this a valuable tool for the beginning reader on the topic.

Shelford, Victor E. The ecology of North America. Urbana, University of Illinois Press. \$10.00.

"A comprehensive description of the communities of flora and fauna in North America as they existed around 1600, that is before the European settlers changed the land. Written by one of the most respected men in the field, this work represents almost 50 years of teaching and research. Not a book to be read straight through, it is an invaluable reference and source tool for lay readers and ecologists alike."

Storer, John H. Man in the web of life. New York, Signet, 1968. 95¢ paperback.

Mr. Storer makes a plea to the reader to see how necessary it is for man to use all the sciences and technology to improve his world. He draws a portrait of man as he is in today's world and what the future world can be if he will only plan for it. Provides a total view.

Storer, John H. The web of life. New York, Signet, 1956. 60¢ paperback.

Subtitled "a first book of ecology," the book should be read by everyone with even slightest interest in ecology, and environmental problems. The style is great and it provides an excellent overview of the subject.

Wagner, Philip Laurence. The human use of the earth. New York, Free Press, 1962. \$1.95 paperback.

A fresh and original treatment of ecological systems and man's influence on and relation to his environment. A useful teaching aid, especially for an introductory social science course.

PESTICIDES AND POLLUTION

Adams, Ansel, and Newhall, Nancy. This is the American earth. New York, Ballantine Books, 1968. \$3.95 paperback.

Superb combination of text and photographs showing the best and worst of the American landscape. Truly inspiring.

Aylesworth, Thomas F. This vital air; this vital water. Chicago, Rand-McNally, 1969. \$4.95.

A clear, easy to read, simple explanation of the problems connected with air and water pollution, accomplishments to date, and research in progress at present.

Battan, Louis J. Unclean sky; a meteorologist looks at air pollution. Garden City, N. Y., Anchor-Doubleday, 1966. \$1.25 paperback.

Stressing the relationships between air pollution and weather, this book covers sources and sizes of pollutant particles, methods for their detection and collection, the damage they do, and suggested techniques for improving the situation.

Blake, Peter. God's own junkyard; the planned deterioration of America's landscape. New York, Holt, Rinehart and Winston, 1964. \$2.95 paperback.

Mr. Blake levies a scathing attack upon billboard owners, highway lobbyists, land developers, and slumlords who have done so much to destroy the beauty around us. The accompanying photographs serve to enhance the message.

Boyle, Robert. The Hudson River: a natural and unnatural history. New York, Norton, 1969. \$6.95.

While writing of the Hudson in all its colorful aspects and phases from wilderness to the present, Boyle also describes the Hudson's pollution and its disastrous effects and strikes out against modern industrial carelessness in general.

Bregman, Jack, and Lenormand, Sergei. The pollution paradox. New York, Spartan Books, 1966. \$4.95.

A human account of the threat to our total environment written with scientific accuracy. "Serious air and water pollution problems are rapidly getting worse and will have reached the calamitous stage in the next ten to fifteen years."

Bullards, O. Crisis on the Columbia. Portland, Ore., The Touchstone Press, 1968. \$4.95.

An absorbing account of how 40 years of engineering skill and technological progress have changed the mighty Columbia from a rushing torrent into a thousand mile lake. In the process, ecological balances have been upset and a considerable area of the Columbia basin has suffered major flood damage. This is the story in both word and excellent photography.

Carr, Donald E. The breath of life. New York, Norton, 1965. \$3.95.

Dr. Carr, a research chemist, studies the origin and nature of air pollution and concludes that gasoline and low grade heating oils are the true culprits. The only solution he sees is in a revised auto engine design and improved public transportation. Includes a good bibliography.

Carson, Rachel. Silent spring. New York, Crest, or Greenwich, Conn., Fawcett World, 1962. 95¢ paperback.

Miss Carson focuses attention on a highly controversial subject: the use of chemical insecticides. Using specific cases, she cites the loss of birds and wildflowers, to indict the unthinking use of pesticides. Although the book is heavily documented, the work was both praised and damned by critics and opponents.

Community action program for air pollution control. Prepared by the National Association of Counties. Available from the authors, 1001 Connecticut Avenue, N.W., Washington, D. C. 20036. \$1.00 paperback.

Discusses the problems of organization, staffing, financial, and technical assistance, and how to drum up community support.

Community action program for water pollution control. Prepared by the National Association of Counties Research Foundation. Washington, D. C., published by the authors, 1967. \$1.00 paperback.

All the major programs and guidelines needed to institute an effective water pollution control program are included in this handbook.

Cowan, Edward. Oil and water: the Torrey Canyon Disaster. Philadelphia, Lippincott, 1968. \$6.95.

A description of the appalling damage done to natural life on the English channel as a result of the wreck of the Torrey Canyon—a giant oil tanker.

Dales, John H. Pollution, property and prices. Toronto, University of Toronto Press, 1968. \$2.50 paperback.

This is an interesting slant on price theory. It proposes no radical changes in our culture, but we would probably have less pollution if we adopted some of the ideas here.

Degler, Stanley E., and Bloom, Sandra, editors. Federal pollution control problems, water, air, and solid wastes. Washington, BNA Books, 1969. \$4.00 paperback.

Discusses current federal control programs for water, air and the disposal of wastes. The status of all enforcement actions are summarized, official documents on water quality standards are presented, and the basic federal laws on the matter are reproduced in full.

Degler, Stanley E., ed. Oil pollution-problems and policies. Washington, D. C., BNA Books, 1969. \$4.00 paperback.

Summarizes the problems of oil pollution both at sea and in the nation's waterways. Included in the book are documents setting forth the policies of the Federal Government and the text of federal oil pollution control statutes.

Degler, Stanley E., ed. State air pollution control laws. Washington, BNA Books, 1969. \$4.00 paperback.

Summarizes the pollution control laws which have been adopted by 46 states. The California statute and the model state law developed by the council of state governments are reproduced in full.

Edelson, Edward, and Warshofsky, Fred. Poisons in the air: a special report of air pollution. Pocket Books, 1966. \$1.00 paperback.

Following a warning to "Stop breathing! You may be killing yourself," the authors marshal the facts and figures on disease and death resulting from air pollution. Includes a survey of who polluters are; what is being done about the problem; and what desperately needs to be done.

The environment; a national mission for the seventies, by the editors of Fortune. New York, Harper and Row, 1969. \$1.25 paperback.

Main focus is on pollution and the relatively small amount done so far in combatting it. Suggests what could be done. Includes a statement from President Nixon and Senator Muskie.

Esposito, John C. Vanishing air. Report of the Ralph Nader Study Group on Pollution. New York, Grossman, 1970. 95¢ paperback.

This report indicts both government and industry for actively fighting measures to control air pollution, particularly that caused by automobiles. Politics and procrastination are given much of the blame. Also discusses current research and regulation.

Goldman, Marshall I., ed. Controlling pollution: the economics of a cleaner America. New York, Prentice-Hall, 1967. \$1.95 paperback.

Although some of the chapters are better than others, as a whole the book is a good summary of the present state of air pollution. Many of the articles are geared to motivating the reader to action.

Goldstein, Jerome. Garbage as you like it. Emmaus, Penn., Rodale Books, 1969. \$4.95.

Goldstein here reviews the problem of wastes-how to economically, safely, and adequately dispose of sewage, organic solids, paper, cans, bottles, junk, etc. Written in easy-to-read style for a wide audience. References. Designed to draw public concern to trash problem.

Graham, Frank, Jr. Disaster by default: politics and water pollution. Philadelphia, M. Evans, 1966. \$5.95.

Using many government sources, especially the public health service, this book traces a major example of our strange culture/economics syndrome, our tendency to lack foresight, to apply too little too late, and at astronomical cost.

Graham, Frank, Jr. Since silent spring. Boston, Houghton-Mifflin, 1969. \$6.95.

Graham, field editor for Audubon magazine, does a good job of bringing the public up-to-date on research on and events concerning, the problem of pesticides since the publication of Rachel Carson's book. Good documentation within the text, important issues, and appendices on what's good and what's bad in the pesticide market, make it a commendable book.

Leinwand, Gerald, general editor. Air and water pollution. New York, Washington Square Press, 1969. 75¢ paperback.

This is one in a series of books published to be used along with text materials in urban schools. Smoke, smog, soot and soap suds are all there. Written in interestingly readable style, it will suit students and the beginning layman. Accented by pointed photographs.

Lewis, Alfred. Clean the air?; fighting smoke, smog and smaze across the country. New York, McGraw Hill, 1965. \$3.50 paperback.

"This survey traces the curse of modern industrial civilization with chapters on the chemistry of various pollutants, the damage they cause to plant and human life, the research that is currently under way, and some of the present remedies."-New York Times Book Review.

Lewis, Howard R. With every breath you take: the poisons of air pollution, how they are injuring our health, and what we must do about them. New York, Crown, 1965. \$5.50.

As alarming as the shocking facts of the danger of air pollution are the surveys that indicate that the general public is either unaware of the problem, or skeptical of its demonstrable menace to health. A comprehensive and well-written document designed specifically to educate and arouse the voter to action.

Perry, John. Our polluted world: can man survive? New York, Watts, 1967. \$4.95.

In that people are the basic cause of pollution, and world population is expanding rapidly, now may be the decisive moment if man is to save himself. An excellent and alarming primer on air and water pollution.

Potomac Planning Task Force, U.S. Dept. of the Interior. The Potomac; a report on its imperiled future and a guide for its orderly development. Washington, D. C., U.S. Govt. Printing Office, 1967. For sale from Superintendent of Documents, Washington, D. C., 20402. \$5.00.

Lyndon Johnson said, "The river rich in history and memory which flows by our national capital should serve as a model of scenic and recreational values." This report shows very graphically with text, photos and drawings what the river is now and what it is hoped it can be.

President's Science Advisory Committee, Environmental Pollution Panel, Report. Restoring the quality of our environment. The White House, 1965. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C., 20402. \$1.25 paperback.

Studies pollution from all angles--health effects, sources, kinds, effects on living organisms--followed by a section on recommendations. Additional appendices, and large index.

Rudd, Robert L. Pesticides and the living landscape. Madison, University of Wisconsin Press, 1964. \$1.95 paperback.

Considered by many to be one of the outstanding books of recent years, this is an attempt to acquaint the layman with the issues involved in the pesticides controversy. Chemistry, biology, and ecology are discussed in language understandable to the person not trained in these fields.

Stewart, George R. Not so rich as you think: garbage, smog, junk and sewage--the hidden price we are paying for our affluent society. Boston, Houghton Mifflin, 1968. \$5.00.

Truly a horror story, but one presented with perception, humor, and a thorough understanding of a situation which has grown from a natural and controllable one to a problem of massive proportions.

Still, Henry. Dirty animal. New York, Hawthorn, 1967. \$5.95.

Here is broad coverage of the problem of pollution in all its aspects; land, water, and air. The first seven chapters are vivid descriptions of the way in which man has polluted his environment. The last seven chapters present some of the author's solutions for pollution problems.

Whittan, Jamie L. That we may live. New York, Van Nostrand, 1966. \$6.95.

"Material relating to environmental contamination by pesticides is summarized from an extremely wide point of view. Whittan has tastefully given a rebuttal to those who have been supercritical of pesticide use in any form. Conclusions are well-documented with extensive references. The style is non-technical and the material is presented in logical form and easily understood."--Choice.

Wise, William. Killer smog; the world's worst air pollution disaster. New York, Rand McNally, 1968. \$5.95.

An exciting book which begins with the history of coal smoke in London's air in the 11th century, through the times of John Evelyn, 1611, Sherlock Holmes, 1895, until the disaster of December 5-8, 1952 when almost 2,000 people died. Reads like a suspense novel, but this is no fiction.

THE AMERICAN SCENE

Caudhill, Harry. Night comes to the Cumberlands: a biography of a depressed area. Boston, Little, Brown (Atlantic Monthly Press Book), 1962. \$2.45 paperback.

The story of the depressed area in Eastern Kentucky by a native Kentucky lawyer who served in the State House of Representatives. He describes the depressed state of the land and population there as a result of the disastrous mining policy followed in the last fifty years. The book is a warning as well as a sad tale.

Bronson, William. How to kill a golden state. New York, Doubleday, 1968. \$6.95.

Well documented, and profusely illustrated (over 300 photographs), this book covers a broader spectrum than Dasmann's The Destruction of California. The hard-hitting text is concerned with "freeways, autos, smog, pollution, destruction of wildlife, dreariness of landscape, ugly social ills, filthy streets, and cheap-jack architecture."--Choice.

Coles, Robert. Still hungry in America. Photos by Al Clayton. Introduction by Edward M. Kennedy. New York, World Pub., 1969. \$2.95 paperback.

Basically a photographic essay, complemented by verbatim interviews, psychiatrist Coles shows a stark and sometimes horrifying picture of life in Mississippi, Appalachia, the slums of Atlanta, with its poverty, lack of medical care, unsanitariness and often hunger. Style is personal, rather than academic and leaves the reader with serious ponderings.

Cooley, Richard A. Alaska; a challenge in conservation. Madison, University of Wisconsin Press, 1966. \$1.95 paperback.

Under current land policy in Alaska and with the transfer of lands from federal to state ownership, Cooley feels the State could be endangered by trying to solve its financial problems on a short term basis at the expense of sound resource management. But he also contends that there is a chance now for fresh, new and imaginative resource policy development.

Dasmann, Raymond F. The destruction of California. New York, Macmillan, 1965. \$1.50 paperback.

Dasmann, a native Californian and highly concerned naturalist, presents an indictment of commercial greed and public apathy which have combined to allow the despoilation of California's natural wealth and beauty. Dasmann is not entirely without hope, but the effect is that of a sad book.

Day, Lincoln H., and Day, Alice Taylor. Too many Americans. New York, Dell, 1964. \$1.95 paperback.

An impressive account of the current population dilemma. The Days honestly face some of the social, cultural, and religious values that will ultimately influence the way America attempts to solve the people problem. Comprehensive in presenting points of view. Well-documented and recommended.

Galbraith, John Kenneth. The affluent society. New York, Mentor, c1958. 95¢ paperback.

A stimulating and challenging study of the economics of opulence. He puts forth a compelling argument for a new economic structure.

Hunger, U.S.A. A report of the Citizen's Board of Inquiry into hunger and malnutrition in the United States. Boston, Beacon Press, 1968. \$4.95.

Alarming documentation in facts, statistics, and pictures, showing that extensive malnutrition and starvation do exist in the U.S. currently.

Marine, Gene. America the raped; the engineering mentality and devastation of a continent. New York, Simon and Schuster, 1969. \$5.95.

"A lively account of a muckraker's voyage through the deteriorating landscape of modern America." Mr. Marine, editor of Ramparts, presents a vivid and scathing attack on the spoilers of our lands, embodied in the "engineer". Raises a lot of justifiable points and issues, but the style is a bit melodramatic.

Melman, Seymour. Our depleted society. New York, Delta, 1965. \$2.25 paperback.

In the authors' own words, "This book is an economic audit of the price that America has paid for 20 years of cold war. It is essentially a statement of the conditions of life, both public and private, that have been caused by long priority to guns instead of butter, and by the sustained failure to differentiate between economic growth that is healthy and that which is parasitic." Appendices, sources.

Packard, Vance. The wastemakers. New York, McKay, 1960. 75¢ paperback.

In the third of a trilogy of exposes, Mr. Packard attacks the American ability to consume for the sake of consumption, with no regard for the waste in resources. Although much of the material is not new, the facts are effectively and interestingly presented. As usual Mr. Packard's book gains prolific response from the critics, both pro and con.

President's Council on Recreation and Natural Beauty. From sea to shining sea, a report on the American environment--our natural heritage. Washington, D. C., U.S. Government Printing Office, 1968. \$2.50 paperbound.

The reader is presented with the actions required and being taken to cope with these problems; extensive list of published films and agencies and organizations which can help. Excellent analysis of environmental crisis.

Seligman, Ben. Permanent poverty; an American syndrome. Chicago, Quadrangle Books, 1968. \$6.50.

"The author, a labor economist at the University of Massachusetts, has written a synthesis of the available materials on the nature and future of poverty in the U.S. He discusses origins, and magnitude of the problems, the Negro, the aged, the young, the rural minorities, the unemployed, and the position of the poor before the law."-Library Journal. His conclusion is pessimistic and hence he has his optimistic counterparts.

Wood, Samuel E., and Lembke, Daryl. Federal threats to the California landscape. Sacramento, California Tomorrow, 1967. \$1.00 paperback.

This book does something that is rather rare: it assimilates and brings together various aspects of an environmental problem. Besides showing what is being done to the landscape of California, the authors illustrate how federal, state and local programs are not coordinated and are often working at cross-purpose.

POPULATION AND FOOD PRODUCTION

American Assembly. Overcoming world hunger, edited by Clifford M. Hardin. Englewood Cliffs, Prentice-Hall, 1968. \$1.95 paperback.

The volume was originally designed as background materials for participants of the 34th American Assembly which met late in 1968. Written for the non-specialist, there are facts on current food production, estimates on future needs, information on the new high-yield grains. As Hardin is currently Secretary of Agriculture, the sections on population control and food aid may point to policy directions in the near future."-Choice.

Appleman, Philip. The silent explosion. Boston, Beacon Press, 1964. \$1.95 paperback.

One of the special values of Mr. Appleman's book is that it reveals the moral nature of the population problem. He feels that the U.S. government has the responsibility to devote large amounts of money and brains to research on human reproduction control, and make its knowledge available to the rest of the world. Has economic and social implications as well.

Bates, Marston. Prevalence of people. New York, Scribner's, c1955, 1962. \$4.50.

A universally acclaimed success, this volume is in keeping with Mr. Bates' other works in style and tone. Challenging but not alarmist, straightforward, highly readable, and scientifically accurate, he covers a very complex subject in a manner that makes it a worthwhile introduction for the average reader. Subjects include human biology, reproduction control, disease, famine, and hygiene as part of the greater discipline of demography. Age of the work is no hindrance.

Benarde, Melvin A. Race against famine. Philadelphia, Macrae, 1968. \$4.75.

Dramatic presentation of how the world's total food supply today is lagging behind the world's increasing total human population. Need for more production of nutritious food, particularly in the developing countries, and for the manufacture of protein - rich concentrates to prevent large-scale famines is shown.

"
Borgstrom, Georg. The hungry planet; the modern world at the edge of famine. New York, Macmillan, 1965. \$2.95 paper-back.

A treatise on the increasing population and dwindling food supply, written by a professor of food science at Michigan State University. Complimented by charts, graphs, and tables, the text is readable and includes only a minimum of technical jargon. The result is an original and thought-provoking analysis of one of the world's most pressing problems.

"
Borgstrom, Georg. Too many; a study of earth's biological limitations. New York, Macmillan, 1969. \$7.95.

Adds to the material presented in The Hungry Planet by discussing the factors which limit the global production of human food. One conclusion is that the only true excess in nature is man himself.

Calder, Ritchie. Common sense about a starving world. New York, Macmillan, 1962. Out of print.

In easy journalistic style Professor Calder discusses the increased numbers of people. He is not disturbed about our ability to meet the challenge, but he is profoundly disturbed that the present population explosion may create chaos before we bring ourselves to act. It is this sense of urgency that makes his book absorbing and dramatic.

Cépède, Michel; Houtart, Francois, and Grond, Linus. Population and food. New York, Sheed and Ward, 1964. \$10.00.

"The authors are a French agronomist, a Belgian sociologist, and a Belgian demographer. As the writers see it, the obstacles lie not in the capacity of the earth to produce, but in man himself--in his ability to readjust his behavior so that the gap between the standard of living in different countries can be narrowed."--Book Week

Clark, Colin. Population growth and land use. New York, St. Martin's Press, 1967. \$14.00.

Recommended for college students and interested laymen, this study of the effects of population growth upon food production, land use, urbanization, and economic development is a well-documented scholarly effort that deserves attention.

Cochrane, Williard W. The world food problem; a guardly optimistic view. Philadelphia, Crowell, 1969. \$3.50 paperback.

Cochrane attempts to show by graphs, data, ecc. that world food production has kept pace with world population but that a dangerous imbalance exists between the developed and less developed countries.

Cook, Robert C., and Lecht, Jane. People! an introduction to the study of population. Population Reference Bureau, Washington, D. C., Columbia Books, 1968. \$1.50 paperback.

First in a series of books designed to explain the population problem simply and clearly. Shows how overpopulation relates to other environmental problems. Large type and pictures make it adaptable to use in high school and beginning lay reader.

Ehrlich, Paul R. The population bomb. New York, Ballantine Books, 1968. 95¢ paperback.

A must in any ecology library! Population theory and issues presented in straightforward fashion by an expert in population biology. Dr. Ehrlich discusses how little has been done, and how little is planned to be done to prevent massive starvation in the near future. Excellent for discussion and stimulus to action.

Ehrlich, Paul R. and Anne H. Population/resources/environment; issues in human ecology. San Franscisco, W. H. Freeman, 1970. \$8.95.

A comprehensive, authoritative, well-documented analysis of the worldwide crisis of overpopulation and the resulting demands on food, resources, and the environment. Taking a broad ecological approach, the Ehrlich's demonstrate that problems of modern society such as environmental deterioration, hunger, resource depletion, and war are closely interconnected and that together they constitute a challenge without precedent in human history. Offer many constructive proposals to avert the disaster.

Fagley, Richard Martin. The population explosion and Christian responsibility. New York, Oxford University Press, 1960. \$4.25.

A book with value to the social sciences as well as to theology, Dr. Fagley presents the idea that a consensus of Protestant opinion on birth control is necessary to move civil governments into supporting birth control programs. His appeal is based on a desire for more responsible parenthood in this overpopulated age. Lots of statistics and moral evidence to support argument.

Frankel, Lillian B. This crowded world; an introduction to the study of population. Washington, D. C., Columbia Books, 1970. Published for the Population Reference Bureau, Inc. \$1.50 paperback.

Easy text, quite simple explanations and good photos and charts make this a useful tool for school or for newly-exposed lay readers.

Freedman, Ronald, editor. Population: the vital revolution. New York, Anchor, 1964. \$1.45 paperback.

Nineteen experts analyze world population trends in non-technical articles.

Hardin, Garret, edited. Population, evolution and birth control; a collage of controversial ideas. San Francisco, W. H. Freeman, 1965. \$2.95 paperback.

An engrossing collection of 123 articles, reviews and criticisms reflecting all shades of opinion on the social implications of biology. The readings have been arranged to show the historical development of major ideas and to clarify the points of controversy. Excellent collateral reading.

Harrar, Jacob George. Strategy for the conquest of hunger; selected papers of J. George Harrar, President of the Rockefeller Foundation. New York, Rockefeller Foundation, 1967. Out of print.

These personal papers are all centered around the theme of food production for the world. Discusses scientific and technological advances as well as various projects on international cooperation in food production. Highly readable and cautiously optimistic.

Jones, Mervyn. In famine's shadow; a private war on hunger. Boston, Beacon Press, 1965. \$4.95.

A progress report of Oxfam (Oxford Committee for Famine Relief), an English private relief organization, formed late in World War II, which offers help and hope to those who suffer from the relentless famine which stalks a majority of the world's population. Well-written and illustrated, it should be of interest to all readers.

Lader, Lawrence. Abortion. Boston, Beacon Press, 1966. \$1.95 paperback.

A significant book on one of the most controversial issues in the U.S. today. Lader presents all the issues-- political, social, medical and religious. There are comparisons with other countries and a section on proposed reform in the U.S. Very readable. References, bibliography, and index.

Laffin, John. The hunger to come. London, Abelard-Schuman, 1966. \$4.95.

A British journalist depicts in vivid and forceful terms the inevitable result of our uncontrolled population growth. He argues that America's prosperity cannot last more than 15 years, that by 1982, one in four people will be Chinese, and what is needed is world-wide birth control and drastically increased food supply. Statistical data well used, "Definitely recommended."--Choice.

Malthus, Thomas, Huxley, J., and Osborn, F. On population: three essays on population. New York, Mentor, 1969. 60¢ paperback.

The classic statement of the 19th century as well as two contemporary views.

Moomaw, I. W. To hunger no more; a positive reply to human need. New York, Friendship Press, 1963. Out of print.

The conclusions and insights presented by this author are the result of advice and suggestions given him by agricultural missionaries and government workers in many lands. Essentially Mr. Moomaw offers the lessons learned by churchmen in their efforts to help the less fortunate parts of the world and suggests that the only efforts likely to succeed in the long run are those which "help the people to help themselves."

O'Brien, J. A. Family planning in an exploding population. New York, Hawthorn Books, 1969. \$5.95.

"Father O'Brien, noted author, research professor of theology, University of Notre Dame, is one of the first Catholic priests to advocate openly birth control as a more humane means than famine, pestilence and war of controlling the population explosion." Written before the papal encyclical *Humanae Vitae*, July 30, 1968, denouncing birth control.

Osborn, Fairfield, edited. Our crowded planet: essays on the pressures of population. New York, Doubleday, 1962. \$4.50.

Biological, economic, political and religious views are presented in these essays showing the many pressures that human overcrowding is placing on the prospects of the world.

Paddock, William and Paul. Hungry nations. Boston, Little, Brown and Co., 1964. \$1.95 paperback.

The authors discuss American aid to the underdeveloped nations. Informed citizens can find here an absorbing education in why the world is divided between rich and poor and why so many of our efforts to do something about it have proved frustratingly unsuccessful.-- From the jacket.

President's Committee on population and family planning. Population and family planning, the transition from concern to action. Washington, D. C., U.S. Department of Health, Education and Welfare, 1963.

This 43 page pamphlet sets forth proposals for government action in population control--policy, programs and research. States that it is a basic right of parents to determine the number and spacing of their children and that the government has an obligation to help them in exercising this right.

Quinn, Francis X., edited. Population ethics. Washington, D. C., Corpus Books, 1969. \$5.95.

A food expert, a demographer, an economist, a sociologist, and a theologian present the facts on the population /food problem. They stress that whatever measures are taken, they must not neglect the human, moral, and ethical dimensions of the problem. --Choice

Sax, Karl. Standing room only: the world's exploding population. Boston, Beacon Press, 1960. \$1.75.

Different population theories considered. He disagrees with using material goods to solve problems. Good for the general reader.

Smith, David T., ed. Abortion and the law; essays by D. James George and others. Cleveland, Western Reserve University Press, 1967. \$7.00.

The book sets forth different religious, medical, and legal views which reflect not only suggestions for revisions and liberalization of present state abortion laws, but also a defense of them as well. The reader is given a wide-ranging picture of research and attitudes. It deserves the attention of laymen and specialist alike.

Stockwell, E. G. Population and people. Chicago, Quadrangle Books, 1968. \$6.95.

An elementary text for a population course or supplementary reading for a broader problems course. Easily read by college student and concerned layman. Up-to-date and documented, Mr. Stockwell presents a qualitative, interpretative description of the fundamental demographic processes such as mortality, fertility, immigration and the demographic variables: population size, composition and distribution as they relate to the U.S.

U.S. Department of the Interior. The population challenge. U.S. Department of the Interior, Conservation Yearbook No. 2. Washington, D. C., U.S. Government Printing Office, 1966. \$1.25.

Our expanding population has tried the Nation's resources, often turning beautiful areas into wastelands. Describes steps necessary to preserve our way of life.

Wilson, Charles Morrow. The fight against hunger. New York, Funk and Wagnalls, 1969. \$6.95.

Written in the first person, this book is the journal of the author's 44 years spent in farm reporting and agricultural corresponding from all around the globe. More important it is a statement of hope in the face of world hunger.

Young, Louise B., edited. Population in perspective. New York, Oxford University Press, 1968. \$4.95 paperback.

A well-coordinated volume containing excerpts from 65 different sources beginning with Malthus and up to the present time. In addition to scientific and sociological works, the editor has included the writings of poets, philosophers, churchmen and others, giving it a more humanistic slant than many comparable works. Arranged chronologically, and topically in four areas. Not as an introduction to populations, but a valuable second or third book.

SCIENCE AND THE FUTURE

Brown, Harrison. The challenge of man's future. New York, Viking Press, 1954, 1969. \$1.65 paperback.

A significantly important book in helping to identify the face of the future. Mr. Brown discusses the problems arising from overpopulation, decreasing food supply, industrialization and use of resources. It makes it startlingly clear how American liberty and Asian hunger are irrevocably linked.

Brown, Harrison, and Bonner, James, and Weir, John. Next hundred years. New York, Viking, 1961. \$1.45 paperback.

Somewhat more optimistic than other writers, these three men feel that the future might not be as bleak as many believe. They contend that science and technology have the power to avert great tragedies in natural resources in the years to come.

Brown, Lester. Seeds of change; the green revolution and development in the 1970's. New York, Praeger, 1970. \$1.25 paperback.

Studies the effect of the new agricultural breakthroughs in wheat and rice and the possible long-range changes they might bring to many parts of the world, socially, culturally and economically.

Calder, Nigel, edited. Unless peace comes: a scientific forecast of new weapons. New York, Viking Press, 1968. \$2.95 paperback.

This book discusses not only the changes to be expected in conventional warfare, but in atomic and biological-chemical warfare as well. The quiet restraint, the general excellence of the writing, and the expertise of the authors lend all too real a sense of absolute authority and conviction to this important book.--Harpers.

Calder, Ritchie. After the seventh day; the world man created. New York, Mentor, 1961. 75¢ paperback.

"A brain-stretching historical panorama of man in relation to his environment. Calder has a rare gift for popularizing science and presents us with a vision of man's potential to change the world in which he lives through science and increased technology."--San Francisco Chronicle.

Bell, Daniel, ed. Toward the year 2000. Prepared by the American Academy of arts and sciences. Boston, Beacon Press, 1968. \$2.95 paperback.

This book is a reprint of the summer 1967 issue of Daedalus. Among the topics dealt with are education, meritocracy, political development forecasting, youth, privacy, urban development, communications, and democracy.

Clarke, Robin. The silent weapons. New York, McKay, 1968. \$4.95.

A British science writer and editor, Clarke acknowledges at the outset that his book is essentially a synthesis of previously published materials. Nonetheless, he has put together a useful primer on the scientific, strategic and political aspects of chemical and biological warfare. Well-written and documented.

Commoner, Barry. Science and survival. New York, Viking Compass, 1963. \$1.35 paperback.

The author charges that the present state of science and technology in relation to *society endangers the* existence of all forms of life. Much of the blame he lays at the feet of scientists for lack of scientific integrity and for adhering to secrecy regulations which prevent open discussion of new technological developments.

Curtis, Richard, and Hagan, Elizabeth. Perils of the peaceful atom. New York, Ballantine, 1970. \$1.25 paperback.

"The authors present a case against nuclear power and reactor facilities. They argue that the potential of nuclear mishap, coupled with inadequate government regulation and safety precautions, plus the ever-present factors of human error and accident can unleash into the atmosphere enough radiation to poison both the present generation and those to come." Responsible reporting, highly recommended.

Darling, Frank Fraser, editor. Future environments of North America; being the record of a conference convened by the Conservation Foundation in April, 1965, at Airlie House, Warrenton, Virginia. Garden City, Natural History Press, 1965. \$12.50.

Divided into six topic areas with five or six papers on each topic from selected authors. Represents a milestone in the development of an environmental philosophy for this country. Interesting reading for all types of readers yet still basically scholarly.

Forbes, R. J. Conquest of nature; technology and its consequences. New York, Mentor Books, (New American Library) 1968. \$1.25 paperback.

For the sophisticated reader. Thoughtful and well-written essays that provide an introductory survey to the problems of technology in our society. His own conclusion is that moral responsibility must accompany technological and scientific creativity.

Fowler, Eric B., ed. Radioactive fallout, soils, plants, foods, man. New York, Elsevier Pub. Co., 1965. \$15.00.

This book should be a "must" for any serious student of radioactive fallout. Completely rewritten, the material originates from an American Chemical Society Symposium held in 1960. Excellent summary and bibliography. Followed up by the June 1965 Hanford Biology Symposium as reported in December, 1965, Health Physics.

Huxley, Julian S. Evolution in action. New York, Signet, 1957. 60¢ paperback.

An interesting and scholarly essay on man's evolutionary past and the portents for his future.

Kostelanetz, Richard, ed. Beyond left and right; radical thought for our times. New York, Morrow, 1968. \$2.95 paperback.

Thirty-six essays focused on the future. The articles, mostly previously published, are concerned with the threats and opportunities implicit in new technologies. Bibliography.

McCarthy, Richard D. The ultimate folly; war by pestilence, asphyxiation, and defoliation. New York, Vintage, 1969. \$1.95 paperback.

This book describes the attempts to control chemical warfare after World War I and the tradition of restraint that prevented its use in World War II. He then shows how this tradition was reversed beginning in 1956. The change, he asserts, has resulted in a dangerous policy of research, production and stockpiling of chemical and biological weapons. -New Republic.

Novick, Sheldon. The careless atom. New York, Dell, 1968. \$2.25 paperback.

"The author is concerned with the uncontrolled radioactive pollution likely to result from the rapid expansion of this nation's program of nuclear reactor construction for commercial power production. (He charges that) dangers are much increased because the development of commercial power reactors is being pushed much harder than our power needs for the next few centuries demand." Well explained for the layman. Library Journal.

Rose, S., ed. CBW. Chemical and Biological Warfare. Boston, Beacon Press, 1969. \$1.95 paperback.

The organizer of the London Conference on chemical and biological warfare held in 1968 now offers an edited version of the conference with new facts that have since been acquired. He discusses the research of various countries, the legality of such weapons, scientific responsibility, medical ethics, secrecy and academic freedom in research and prospects for the future.

Shurcliff, William A. SST and Sonic boom handbook. New York, Ballantine, 1970. 95¢ paperback.

A documented source book on the supersonic transport planes that proves that the SST is an incredible, unnecessary insult to the living environment. The author indicates what the reader can do to stop the SST's.

United Nations. Chemical and bacteriological (biological) weapons and the effects of their possible use. A United Nations report, No. E.69/1.24. Foreword by George Wald, Dept. of Biology, Harvard University, Nobel prize winner. New York, Ballantine, 1970. \$1.25 paperback.

This book describes the characteristics of chemical and biological agents, their immediate and long-term effects on humans as well as political, military, geographical, and meteorological aspects. Appendices of agents and effects, bibliography, no index.

U.S. Department of the Interior. Man-an endangered species? U.S. Dept. of the Interior, Yearbook, No. 4, 1968. \$1.50 paperback.

Man through unbridled technology and population pressures has made himself a threatened species. Report is excellent for classroom and discussion use.

Wallia, C. S. Toward century 21; technology, society and human values. Chicago, Basic Books, 1970. \$7.50.

The contributors discuss overpopulation, the misuse of DDT, water and air pollution, the possibilities of more government control and other current concerns.

CONSERVATION -- GENERAL

Abbey, Edward. Desert solitaire: a season in the wilderness. New York, McGraw Hill, 1968. \$5.95.

The author describes 2 seasons spent in Arches National Park in Southeast Utah with vigor and an appreciation of the desert. Mr. Abbey has something important to say, and he has reason to degrade man-especially the tourist and the bureaucrat--in saying it. -Library Journal.

Baumann, Ruth. Cherokee Marsh: win-draw-compromise? A study of democracy in action. Madison, University of Wisconsin Press, 1968. Out of print.

The story of Cherokee Marsh is a long and controversial one. This case history is designed to highlight the political, governmental, and socioeconomic aspects of policy-making. Its purpose is to help citizens and students define, describe, and then take positions on public issues.

Boston, Robert Cahn. Will success spoil the national parks. Boston, Christian Science Monitor, 1968. \$1.00.

A reprint of a series of articles appearing in the Christian Science Monitor concerning the use and abuse of the national parks. Offers broad coverage of policy and outdoor recreation.

Brockman, Christian Frank. Recreational use of wild lands. New York, McGraw-Hill, 1959. \$10.50.

This book presents a broad, basic outline of the background, importance, values and requirements of the recreational management of wild lands. Provides the reader with the varied concepts of recreational wild land use. Selected bibliography, index.

Brower, David, edited. Wilderness; America's living heritage. Seventh Wilderness Conference sponsored by the Sierra Club. San Francisco, Sierra Club, 1961. \$5.75.

This conference brings together some very concerned people who care about saving America's wilderness. Includes both speeches and the texts of discussions. Very readable account.

Brower, David, ed. Wildlands in our civilization. With contributions from the first five Biennial Wilderness Conferences, 1949-1957. San Francisco, Sierra Club, 1964. \$5.75.

This volume surveys some of the ideas presented in the early conferences. Not built around a single theme, it is an inventory of how many tasks remain undone after a decade.

Brower, David, ed. The meaning of wilderness to science. Proceedings of the Sixth Biennial Wilderness Conference. San Francisco, Sierra Club, 1960. \$5.75.

The proceedings of this conference are focused on the need for wilderness for all society, and particularly its relationship to science, as a source of materials and as a huge natural ecology laboratory.

Carhart, Arthur H. Water--or your life. Philadelphia, Lippincott, 1959. Rev. ed. \$5.50.

"An important addition to the conservation library of America. It has the power to shock, to startle the thinking reader into an awareness that something is wrong in what we have done and are doing to our vital water resources."-- William Vogt, Jr., Izaak Walton League.

Carstenson, Vernon, ed. The public lands; studies in the history of the public domain. Madison, University of Wisconsin Press, 1963. \$3.25 paperback.

These 28 articles, selected from journals of history and economics, document the changing intent of federal policy from the time of sales for revenue to the recent system of protection and management. Broad scope and variety make this an extremely useful volume for college and collateral reading.

Citizen's Advisory Committee on Environmental Quality. Community action for environmental quality. For sale from the Superintendent of Documents, U.S. Govt. Printing Office, Washington, D. C., 20402. 60¢ paperback.

42 page booklet on areas of environmental quality where citizen's can take an active role. Includes appendices of state, federal and private organizations where help and support can be obtained. Also pamphlet bibliography.

Clawson, Marion. Man and land in the U.S. Lincoln, University of Nebraska Press, 1964. \$5.95.

In non-technical language, Mr. Clawson discusses the evolution of land use in the U.S. from colonial times to the present. Special emphasis is given to the ideas and philosophies which men have held regarding land. Considers all aspects of land use--urban, agricultural, grazing, forestry and recreational.

Clepper, Henry E. Origins of American conservation. New York, Ronald Press, 1966. \$4.50.

This book gives part of the history of the growth of conservation. Each chapter can stand alone; together they comprise an informative discussion of the origins, actions, policies, and programs of the conservation effort.

Cooley, Richard A. Politics and conservation; the decline of the Alaska salmon. New York, Harper, 1963. Out of print.

Mr. Cooley provides a useful addition to the limited number of studies on the politics of conservation. Working primarily from a historical and economic approach, he skillfully leads the reader through the long, sordid history of repeated frustration of conservation efforts by a strong well-organized lobby of packers working in conjunction with a weak and sometimes disorganized federal administration.

Darling, F. Fraser, and Eichorn, Noel D. Man and nature in the national parks; reflections on policy. Washington, D. C., Conservation Foundation, 1967. \$1.50 paperback.

An excellent study on the national parks and their use in relation to the effects on ecology. Suggestions for policy and management are put forth. Emphasis is placed on how the rise in population and the increased use of the parks has begun to cause serious resource management problems.

Ekirch, Arthur. Man and nature in America. New York, Columbia University Press, 1963. \$5.95.

A collection of viewpoints on man's relation to his American environment. Concise and readable, the author traces the conflict in American history between harmony and balance with nature, and exploitation of his environment. Leaves many unanswered questions.

Faulkner, Edward H. Plowman's folly. Norman, University of Oklahoma Press, 1943. \$2.95 paperback.

This book causes a radical re-examination of a widely accepted and ecologically destructive plowing method which had been advised by Agricultural Extension people for years.

Frome, Michel. Whose woods these are: the story of the National Forests. Garden City, New York, 1962. \$5.95.

A well-written, informative volume on the nation's forests, the development of the National Forest system, and the conservation issue as it developed and as it is now. Complete with all the heroes and villains.

Gaillard, M. Wilson. Moving the earth for a song. Richmond, Va., John Knox Press, 1970. \$4.00.

This survey of the organizations devoted to preserving our natural resources outlines the history of conservation in the U.S. and suggests how the average person can participate and play a constructive role in conservation.

Hay, J. In defense of nature. Boston, Little-Brown, 1969. \$4.95.

"Hay makes a plea for 'at least an effort toward mutual accommodation.' This is a thought-provoking book that should appeal to the growing number of people who are becoming aware of the fragility of their environment."--
Library Journal.

Hubbard, Alice Harvey. This land is ours; community and conservation projects for citizens. New York, Macmillan, 1960. Out of print.

This is a book of "grass roots" community and conservation projects successfully carried out by public-spirited individuals and groups throughout the country. More than 180 projects are described in detail. For the concerned citizen rather than the specialist.

Huth, Hans. Nature and the American; three centuries of changing attitudes. Berkeley, University of California Press, 1957. \$7.50.

An attractive and important work, especially in regard to the early period of development of conservation in the U.S. Considers the philosophy, poetry, art, and ethics of conservation from colonial days to the present. Copiously illustrated, bibliography, index.

Izaak Walton League of America. Guidelines to conservation education action. Glenview, Illinois, 1966.

This publication has but one purpose: to get organized groups and individuals solidly behind worthwhile and much needed action programs in conservation education. It is particularly helpful in making specific suggestions for action.

Kilgore, Bruce M. Wilderness in a changing world. Proceedings of the Ninth Wilderness Conference. San Francisco, Sierra Club, 1966. \$5.75.

This volume discusses how our natural scenic and recreation areas are being rapidly absorbed and lost forever. Slowly the American public is becoming aware of its loss.

League of Women Voters. Education Fund. The big water fight: trials and triumphs of citizen action on problems of supply, pollution, flood, and planning across the U.S.A. Brattleboro, Vt., Stephen Green Press, 1966. \$6.95.

The book studies water resource problems in a three part approach; the water problem in general, specific case studies, and a follow-up for action, citing information sources and agencies in any community likely to be of help.

Leydet, Francois, ed. Tomorrow's wilderness. San Francisco, Sierra Club, 1963. \$5.75.

Papers delivered at the Wilderness Conference by scientists and naturalists on the problem of wilderness preservation.

Little, Charles E. Challenge of the land. New York, Pergamon Press, 1969. \$3.75 paperback.

The thesis presented here is that the challenge of the land is fundamentally a municipal concern..... The option is for urban sprawl and all its concomitant evils--ugliness, substandard living conditions, inefficiency, high tax rates; or for preserved open spaces...where nature remains an integral part. --the preface.

Mitchell, John G., and Stallings, Constance, editors. Ecotactics: the Sierra Club handbook for environmental activists. New York, Pocket Books, 1970. 95¢ paperback.

Ecotactics means Ecology Action: teach-ins, attacks on giant industry pollution practices, community concerns, boycotts, courses in environmental problems, TV and radio campaigns, car pools, refusal to buy no deposit, no return containers, using more muscle power and less electrical power. Contains excellent bibliography and a roster of environmental agencies and concerns.

Nash, Roderick. Wilderness and the American mind. New Haven, Yale University Press, 1967. \$1.95 paperback.

Mr. Nash approaches the American wilderness with the eye of a historian. With the rigorous objectivity of a professional he traces the evolution of the American's attitude toward the frontier. Telling us how we got where we are today, he declines to tell us where to go from here. The book is readable, scholarly, and reveals some surprising subtleties of American thinking.

Nash, Roderick. The American environment: readings in the history of conservation. Reading, Mass., Addison-Wesley, 1968. \$2.95 paperback.

A collection of documents illustrating the development of the American conservation movement as an idea and a reality.

Pinchot, Gifford. Fight for conservation. Seattle, University of Washington Press, 1910. \$2.95 paperback.

Much of the intense fervor of the progressive movement is to be found in this collection of essays written by a reputed conservation leader, during the progressive period. "Conservation," wrote Pinchot, "is a question of right and wrong....."

Robbins, Roy M. Our landed heritage; the public domain 1776-1936. Lincoln, University of Nebraska Press, c1942, 1962. \$1.95 paperback.

A historically accurate, and comprehensive account of the disposal of the public domain in the first century and a half of our nation. Traces the varying goals, of land policy, legislative enactments, administrative decisions and the reality of the law in practice.

Roosevelt, Nicholas. Conservation: now or never. New York, Dodd, Mead, 1969.

Roosevelt surveys the faltering, on-again, off-again progress of the conservation movement in America from the nineteenth century to the present, when numerous conservation groups at long last seem to be making headway in alerting the people to the disaster we face.

Schwartz, William, ed. Voices for the wilderness. Papers from the Sierra Club Wilderness Conference, (8 and 9). New York, Ballantine Books, 1969. \$1.25 paperback.

"At the Wilderness Conference broad support for conservation by distinguished people from many disciplines had made it clear that the declining quality of the whole environment is a threat to us all." Excellent reading with obvious purpose.

Smith, Frank E. The politics of conservation. New York, Pantheon, 1966. \$5.95.

A history of governmental resource development and decision-making related to conservation.

Swift, Ernest F. A conservation saga. Washington, D. C., National Wildlife Federation, 1967. \$5.00.

Former Wisconsin Conservation director presents his philosophy on conservation and his distrust of the general public's commitment to real conservation goals.

U.S. Department of the Interior. Conservation Yearbook. Its your world... The grassroots conservation story. Washington, D. C., U.S. Govt. Printing Office, 1969. \$2.00 paperback.

This recent conservation yearbook of the Interior Department gives current ideas on conservation and what the Department is doing to conserve the natural resources of the U.S.

U.S. Department of the Interior. Conservation Yearbook No. 3. The third wave. Washington, D. C., U.S. Govt. Printing Office, 1967. \$2.00 paperback.

A report to the growing millions concerned with preserving the quality of the Nation's air, water, land, minerals, recreation, and fish and wildlife. The title is based on the historic third phase of conservation--the ecological approach.

Zurhorst, Charles. The conservation fraud. New York, Cowles, 1970. \$4.95.

According to the author, conservation is dominated by powerful special interest groups. He asks for a clear definition of our national policy. He charges that those few policies which do exist are often in direct conflict with each other.

RESOURCE MANAGEMENT AND CONSERVATION

Allen, Shirley Walter, and Leonard, Justin W. Conservation of natural resources; principles and practice in a democracy. New York, McGraw-Hill, 1966. \$9.95.

An easily read, fairly comprehensive volume on natural resources and their preservation. Good photographs complement the text.

Bennet, Hugh H. Elements of soil conservation. New York, McGraw-Hill, 1947. Out of print.

Much more interesting than the title sounds, this book is written for the student, teacher, and layman to convey the more important aspects of soil wastage and methods of soil conservation. Broad coverage, sound philosophy and outstanding photographs make this a conservation classic.

Burton, Ian, and Kate, Robert W., editors. Readings in resource management and conservation. Chicago, University of Chicago Press, 1965. \$8.50.

Designed to be used as collateral reading for undergraduate education of conservation and resource management. Provides a variety of theory and opinion not usually available in a text. Readings are generally from a social science and behavioral science viewpoint instead of administration, biology, or engineering slant. Stresses the application of scientific methods for optimal use of land and water.

Carhart, Arthur H. The national forests. New York, Knopf, 1959. Out of print.

Illustrated and in readable style, the author provides an armchair visit to 10 major national forest areas in the U.S. He explains the philosophies, purposes, and responsibilities of the U.S. Forest Service and discusses their effort to balance the conflicting interests of farmers, sportsmen, lumberers, and cattle grazers.

Callison, Charles H., ed. America's natural resources. Revised edition. New York, Ronald Press, 1967. \$6.00.

A series of chapters on conservation, primarily wildlife, water and soil by different authors in the field. Highly readable, it attempts to present the uninformed citizen with facts and philosophy to enable him to do his part in helping to conserve our resources.

Clarke, Arthur C. Challenge of the sea. New York, Dell, c1960, 1966. 50¢ paperback.

Exceedingly well received, this book by a foremost science writer discusses the importance of the underwater world to the future of mankind and the possibility of the sea being a major source of food. Easy reading.

Clepper, Henry, and Meyer, Arthur B. World of the forest. Boston, D. C. Heath, 1965. \$1.75 paperback.

Prepared in cooperation with the Society of American Foresters, this non-technical book covers the importance of the world's forest resources and the significant part they play in the biological, economic, and social welfare of the people and the nation.

Bardach, John. Harvest of the sea. New York, Harper and Row, 1968. \$6.95.

An authoritative work of popular science, readers will enjoy this discussion of ocean ecology which balances the fantastic possibilities with the technical, economic, and political difficulties. A lucid treatment of present and future techniques and problems and a plea for careful conservation planning, lest we mistreat the sea as we have the land.

Cloud, Preston, ed. Resources and man. San Francisco, W. H. Freeman, 1969. \$2.95 paperback.

This scholarly and documented book is the official report of a Committee on Resources and Man established by the National Academy of Sciences in 1966. Their conclusions are that population control and better resource management are crucial. Includes 26 specific steps for a plan of action.

Furon, Raymond. The problem of water; a world study. Translated by Paul Barnes. New York, Elsevier Pub. Co., 1967. \$7.50.

Mr. Furon, of the "Faculte" de Sciences, Paris, demonstrates a broad view both in geography and in time. His well-documented book contains much information that will be new to the American reader, information about other parts of the world. The information on water supply and use in Paris from 300 A.D. will be very revealing to most Americans."--Library Journal

Gullion, Edmund A., ed. Uses of the seas. Englewood Cliffs, Prentice-Hall, 1968. For the American Assembly. \$2.45 paperback.

An interesting discussion of the present, planned and future uses of the sea, both peacetime and military. The sea is full of food, minerals and other goodies to be harvested. However the author points out that international policy-making and laws need to be thoroughly understood before the seas can yield up their treasures.

Jarrett, Henry, ed. Comparisons in resource management: six notable programs in other countries and their possible U.S. application. Resources for the Future. Lincoln, University of Nebraska Press, 1961. \$1.65 paperback.

Easy reading style coupled with some interesting comparisons make this a stimulating volume. Essays by 18 different authors.

Marquis, Raiph W., ed. Environmental improvement (air, water and soil). Washington, D. C., Graduate School, U.S. Department of Agriculture, 1966. \$1.50.

Compilation of a series of lectures on the more positive aspects of environmental improvement. Following each main essay is a statement of reaction by two other experts in the field. This provides a variety of ideas and opinions on each topic.

Marx, Wesley. The frail ocean. New York, Ballantine Books, 1967. 95¢ paperback.

A well-documented account of the ocean and the ecological imbalances caused by sewage, commercial pollution, redevelopment of shorelines, building of dams, dumping of radioactive wastes, reclamation of estuaries, and uncontrolled exploitation. A startling book that deserves attention.

Milne, Lorus and Margery. Water and life. New York, Atheneum, 1964. \$5.75.

Serious, but not dull, this well-written and comprehensive volume deals with human, agricultural and industrial water needs and uses. Also, treated are human and industrial pollutants, pesticides, detergents, and desalinization.

Moss, Frank E. The water crisis. Foreword by Paul H. Douglass. New York, Praeger, 1967. \$6.50.

"Describing the politics of water, the author shows how various regions, industries, private-interest groups, and federal, state, and local agencies and governments compete for influence and jurisdiction, thereby deepening the American water crisis. While examining the problems of pollution, shortage, variability, and waste, Senator Moss is concerned with finding solutions. He suggests steps to reorganize our water management activities and achieves a fundamental national water policy." Publisher's note.

Murphy, Earle F. Governing nature. Chicago, Quadrangle Books, 1967. \$7.50.

The author, professor of law at Temple University, is "concerned with primarily the renewable life cycle resources--air, water and land--which face the onslaught of our urban, industrial, technological way of life." He has a good grasp of the economic issues, and principles are amply supplied with examples. Strongly recommended for undergraduates and general readers.

National Staff of Environmental Action, ed. Earth Day--the beginning. New York, Bantam, 1970. \$1.25 paperback.

Over 50 contributors in this volume covering a wide range of environmental problems. Emphasis is on plans of action, although the editors admit that the basic assumption in the book is that environment will have a long battle with entrenched elements of society.

Nikolaieff, George A., ed. The water crisis. The reference shelf, vol. 38, no. 6. New York, H. W. Wilson, 1967. \$3.50.

The 41 articles compiled here represent discussion on various phases of the worldwide water crisis--the dimensions of the crisis, factors that limit supply for human use, pollution, costs of clean water and methods of obtaining it.

Ocean, a Scientific American book. New York, Freeman, 1969. \$3.25.

"Contains all the articles that appeared in the Sept., 1969, single topic issue of Scientific American. Among aspects discussed were the sea's origin, circulation, ecology, and resources, the technology of exploiting those resources, and man's relation to the ocean."

Ordway, Samuel H. Resources and the American dream. New York, Ronald Press, 1953. Out of print.

A short philosophical essay evaluating the American "religious" drive for an ever higher and higher level of living and our failure to recycle nutrients and other "waste" resources. Condemns growth goals and gadgetry, and argues for limiting consumption and regeneration of an individualism based on productive labor, creativity, and careful resource use.

Osborn, Fairfield. The limits of the earth. Boston, Little, Brown, 1953. 1st ed. Out of print.

He analyzes the capacity of the earth to produce enough food to supply the expanding population. Present conditions of subsistence are considered as well as their future possibilities. Significant earlier work.

Overman, Michael. Water: solutions to a problem of supply and demand. New York, Anchor, 1968. \$2.45 paperback.

Intended for the general reader, this book describes what man must do to prevent the potential crisis in water from becoming a reality. Mr. Overman explains the hydrologic cycle, the distribution of water resources, techniques such as dams, canals, wells, aqueducts, new processes such as desalination, and concludes with possibilities for the future.

Parson, Rubin L. Conserving American resources. 2nd ed. Englewood Cliffs, Prentice-Hall, c1956, 1964. \$10.25.

Directed to a wide audience, this volume is concerned with the major resources in this country and what is necessary to maintain them. Particular emphasis on forests, waters, soils, and minerals.

RESOURCES FOR THE FUTURE, a series of monographs on environmental topics published for Resources for the Future by Johns Hopkins Press, Baltimore.

A series of monographic works aimed at various political, social, economic and technical aspects of environmental problems. Wide variety in style and readability as some are quite readable, others are project and research reports. All titles can be found under Resources for the Future in main catalog of Memorial Library.

Sauer, Carl Ortwin. Land and life: a selection from the writings of Carl Ortwin Sauer. Edited by J. Leighly. Berkeley, University of California Press, 1963. \$2.45 paperback.

Selected writings of an astute geographer who appreciated man's relationship to the environment. Readers just getting acquainted with Sauer's writings will find Leighly's introduction helpful.

Sears, Paul B. Deserts on the march. Norman, Okla., University of Oklahoma Press, c1935, revised edition. \$3.75.

Although written 35 years ago, this volume is still relevant. Mr. Sears warns against greed and expediency that turn farm land into dust bowls and send topsoil moving along. He warns that without long-range planning the history of continents may be the chronicle of deserts on the march.

U.S. Department of Agriculture. Yearbook. Washington, D. C., U.S. Govt. Printing Office, 1967. \$2.75.

A highly optimistic look at the American land in articles and interesting photographs. Covers land, water, and wildlife conservation, vacationing and camping, etc. with emphasis on the positive approach and successful measures taken thus far in controlling outdoor problems.

U.S. Department of the Interior. Quest for quality. U.S. Department of the Interior, Conservation Yearbook No. 1. Washington, D. C., U.S. Govt. Printing Office, 1965. \$1.00 paperback.

A full color outline of the challenges presented by a rapidly growing America. Urges us to look at our handling of natural resources with a view to tomorrow's demands and needs. Of exceptional interest to all conservationists, vacationists, students, teachers and naturalists.

U.S. Water Resources Council. Nation's water resources. Washington, D. C., U.S. Govt. Printing Office, 1968. 20¢.

A report to the nation on how water is used and managed in the main river basins of the United States. Various aspects are covered such as water supply, water pollution, wild rivers, flooding, agricultural and recreational uses. A good overview of the nation's water resources.

Water, by Luna B. Leopold, Kenneth S. Davis and the Editors of Life. New York, Time, Inc., 1966. \$6.60.

A popularly designed book showing water and the part it plays in keeping man alive physically, how it effects his culture and the way it has helped shape the face of our planet. Lavishly illustrated. Excellent section on the Ganga (formerly Ganges) River in India.

Wengert, Norman. Natural resources and the political struggle. New York, Random House, 1955. 95¢ paperback.

Wengert presents the idea that struggle is important to good conservation decisions. This is an especially interesting theory since so many decisions on natural resource management are made on a political basis.

Wright, Jim. The coming water famine. New York, Coward-McCann, 1966. \$6.95.

Written by a member of the U.S. House Public Works Committee, Wright's thesis is that the country is rapidly running out of usable water. Half the book is spent in describing the situation, the remainder relates what must be done to avoid a catastrophe. He declares that what is needed is a change in public attitude, a greater sense of administrative urgency, a tightening of congressional procedure and coordinated planning.--Choice.

WILDLIFE

Allen, Durwood L. Our wildlife legacy. New York, Funk and Wagnalls, 1954, 1962 rev. ed. \$6.50.

A writer with the same deep sense of ethical conscience as Aldo Leopold, Mr. Allen presents us with a comprehensive volume on wildlife, conservation and management. This classic volume is enchanting reading as well as ecologically sound.

Costello, David F. The prairie world, with photos by author. New York, Crowell, 1969. \$7.95.

The author presents a panorama of the prairie world--grasses, birds, insects, animals--and shows how they unite to form a magnificent and complex living unity. Easy and interesting reading.

Dasman, Raymond F. Wildlife biology. New York, Wiley, 1964. \$8.95.

Wildlife biology emphasizes ecological principles as the foundation of wildlife management, and covers the characteristics and dynamics of wildlife populations, and their relationships to habitats. Particular attention is given to the difficult questions of "carrying capacity" and the various meanings assigned to it. North American terrestrial environments stressed.

Duell, Roy Pinney. Wildlife in danger. New York, Sloan and Pearce, 1966.

Concentrating on North American birds, mammals, and fish and reptiles, the author "emphasizes that, in addition to predation by man, the loss of a species is due to man-made changes in the environment and that pollution, use of insecticides and other harmful practices are more deadly than any weapons. "

Fisher, James. Wildlife in danger. New York, Viking, 1969. \$12.95.

A basic document that is sure to be a standard reference for several years. Profusely illustrated, it is an encyclopedic, matter of fact, record of wildlife hunted and exploited to the verge of extinction by unthinking individuals and nations. Well worth the investment.

Gabrielson, Ira Noel. Wildlife conservation. New York, Macmillan, 1959. 2nd ed.

"This book is an effort to put into simple language the basic facts in this field and to emphasize that the various programs for the conservation of soil, water, forests and wildlife are so closely interwoven that each vitally effects one or more of the others. All are phases of a single problem--that concerned with the restoration and future wise use of our renewable natural resources." Interesting reading.

Grossman, Mary Louise, and Hamlet, J. N. Our vanishing wilderness. New York, Madison Square Press, 1969. \$14.95.

A superbly illustrated, extremely readable volume. Stresses the interrelationships between animals, environments and humans.

Hickey, J. J., ed. Peregrine falcon populations; their biology and decline. Madison, University of Wisconsin Press, 1969. \$10.00.

This volume represents the papers and discussions (edited and made more readable) from the conference held at The University of Wisconsin in 1965 to study and analyze the decline of the peregrine falcon population since 1950. Such aspects as population dynamics, ecology, pathology, distribution and behavior are also discussed. Especially good in light of recent discoveries about pesticides and pollution. Excellent photos, well received.

Laycock, George. The alien animals. Published for the American Museum of Natural History. New York, Natural History Press, 1967. \$4.95.

Human beings throughout the world all seem to have the peculiar urge to rearrange other living things, either for the sake of sentiment, for economic gain, better hunting and fishing or just for novelty. The results of these urges are almost always disastrous. Such is the topic of this popularly written, thoroughly well-documented book.

Leopold, Aldo. A Sand County Almanac, and sketches here and there. New York, Oxford University Press, 1949. \$1.75 paperback.

Written by a born naturalist and true sportsman, Aldo Leopold describes the ecological makeup of his Wisconsin sand farm. Beneath the charming nature vignettes and attractive illustrations the sensitive reader will find Leopold's real message: the need to develop an ethical rather than economic concept of conservation. A book that deserves a place with the writings of Thoreau and John Muir.

Matthiessen, Peter. Wildlife in America. New York, Viking Compass Books, 1964. \$1.95 paperback.

A narrative of the effect upon wildlife of the coming of the white man to the western hemisphere. From prewhite man to the present, the point is made very clearly that almost every species of wildlife has been affected in some manner. Well written and illustrated.

Moorehead, Alan. No room in the ark. New York, Dell, 1968. 60¢ paperback.

Portrays the destruction of wildlife in Africa. A plea for preservation.

Netboy, A. The Atlantic salmon; a vanishing species. Boston, Houghton-Mifflin, 1968. \$6.95.

Extremely well-written, this is a look at the current decline in the Atlantic salmon population. The author looks at their life cycles, migrations and mysteries and argues that their survival depends on clean passable waters and enlightened regulations.

Niering, William A. The life of the marsh; the North American wetlands. New York, McGraw-Hill, in cooperation with the World Book Encyclopedia (Our living world of nature series). \$4.95.

A tribute to modern bookmaking. Well-written, lavishly illustrated with color photos, this is a natural history of the marsh areas of our country that play such a vital role in our ecological scheme.

Schuhmacher, Eugen. The last of the wild, on the track of rare animals. Translated by Gwynne Vevers and Winwood Reade. London, Collins, 1968.

Schuhmacher spent seven years traveling to the remote parts of the world to gain the photographs that comprise the bulk of this volume. In addition to the many colored, full page photographs, the author has included a short section on his journey, and a longer section describing the animals in the photographs.

Street, Philip. Vanishing animals; preserving nature's rarities. New York, Dutton, 1963. \$5.95.

A British zoologist describes some twenty odd rare species in danger of extinction. He discusses the three means of preservation: controlled exploitation, preservation in national parks and refuges, and finally preservation in captivity. Emphasis is on European and particularly British experience.

Tillet, Paul. Doe day: the antlerless deer controversy in New Jersey. New Brunswick, N. J., Rutgers University Press, 1963. \$1.95 paperback.

In this book the author shows the troubles that the people of New Jersey have had with a growing deer population. The issue came to be a matter of concern to landowners, sportsmen, farmers, wildlife managers.

newspapers, and finally the supreme court. The issue involved is the principle of "an adequate annual kill" to keep the deer population in check. The responses from various segments of the community provide an interesting commentary on our wildlife policy formation.

Trefethen, James B. Crusade for wildlife. Harrisburg, Pa., Stackpole Press, 1961. \$7.50.

An interesting and scholarly volume on the past efforts at conserving animal species. Particularly good for getting acquainted with noteworthy persons in the field. Easy reading.

Trefethen, James B. Wildlife management and conservation. Boston, D. C. Heath, 1964. \$1.60 paperback.

In an attempt to present the fundamentals of wildlife management and conservation, this small book covers such topics as habitat, principles of wildlife population, and management techniques. Here is a review of conservation as generally practiced by conservation agencies.

JOURNALS

Audubon, The Magazine of the National Audubon Society. 1130 Fifth Avenue, New York, New York, 10028. Published bimonthly. Annual subscription; \$8.50.

Gorgeous pictures, interesting articles and book reviews make up the majority of this fascinating journal devoted to the appreciation and preservation of wildlife and natural beauty. The strong conservation-ecology slant makes it particularly helpful to the cause of making people aware of environmental problems.

Catalyst for Environmental Quality. Published by Catalyst, Vivian Fletcher, editor. 274 Madison Avenue, New York, New York, 10017. Published quarterly at \$5.00 a year, \$3.00 student rate.

Composed mainly of feature articles on a variety of environmental topics by specialists in the field. Includes book section, other environmental aids, letters, etc. Purpose is to stimulate action as well as inform. Quite readable.

CF Letter, published by the Conservation Foundation. 1717 Massachusetts Avenue, N.W., Washington, D.C., 20036. Published monthly at \$6.00 per year.

The CF Letter is a monthly report, approximately 12 pages in length, designed to focus that issue on a particular environmental problem. Discusses the political, social, and economic dimensions of the topic with prospects for action. Style is quite readable. Topics thus far included population, environmental policy, highways, electricity, pollution, shorelines and estuaries, etc.

The Ecology Reprint Series, available from Book People, 2010 Seventh Street, Berkeley, California, 94710. All reprints 25¢ each.

A series of reprints of outstanding journal articles by authors such as Garrett Hardin, Aldous Huxley, Rene Dubos, and others from ecological journals. Easy access and short form make them excellent for student and group use.

Environment, published by the Committee for Environmental Education. 438 N. Skinker Blvd., St. Louis, Missouri, 63130. Annual subscription rate: \$8.50 for ten issues.

Approximately 50 pages per issue. Purpose of the magazine is to publish information about the effects of technology on the environment and about the peaceful and military uses of nuclear energy. Articles are documented, interesting and readable.

The Environment Monthly, William Houseman, editor. 420 Lexington Avenue, New York, New York, 10017. Annual subscription rate: \$35 for an individual, also company rates.

A report for professionals-and concerned non-professionals-who need to know what is happening in the field of environmental design. Includes much personal comment. Approximately 12 pages, illustrated. Can be seen at the Center for Environmental Communications and Education Studies, 602 State Street.

Environmental Action, published by Environmental Action, Inc., 2000 P Street, N.W., Washington, D. C., 20036. Student subscription \$3.00 yearly, general subscription, \$4.00. Published biweekly.

Approximately 15 pages per issue. Articles are quite short but hard hitting. Aimed at current issues, legislation, conservation, etc., more than wildlife or natural history. Easy but highly interesting reading.

Environmental Education; a new journal of research and development in conservation education. Published by the Dembar Educational Research Services, Madison, Wisconsin, 53701. Published four times yearly; subscription price: \$7.50, student rate, \$5.00.

An interdisciplinary journal devoted to research and development in the field of environmental communication and education. Articles are primarily research findings, project reports or critical essays. Designed for the professional writer, educators. and researchers, students, naturalists and lay environmental leaders.

National Wildlife; published bimonthly by the National Wildlife Federation. Annual rate: \$5.00. (Subscribing office: 381 West Center Street, Marion, Ohio, 43302). Sold only to NWF members.

Comparable to Audubon in style and format. Profusely illustrated. Includes book section. Devoid of advertising. Purpose is to encourage an awareness of the necessity for wise land use and management of resources on the earth. Easy but interesting reading.

Natural History; The Journal of the American Museum of Natural History, Central Park West at 79th Street, New York, New York, 10024. Yearly subscription: \$7.00.

A highly attractive journal both in the many photographs and illustrations and the variety of subjects dealt with in the articles. Covers topics in the field of sociology, anthropology, astronomy as well as biology, zoology and ecology. Includes book reviews at the end as well.

Sierra Club Bulletin, published by the Sierra Club, 1050 Mills Tower, San Francisco, California, 94104. Annual subscription: \$5.00. Published monthly.

Approximately 25 pages per issue. Articles are two-three pages on varying topics, usually those resources or areas in danger of extinction. Special features include news notes, book reviews and Washington report.

REFERENCE

BNA's Environment Reporter, published by the Bureau of National Affairs, Inc. 1231 25th Street, N.W., Washington, D. C. Available at the engineering and law libraries on U.W. campus. Much too expensive for personal purchase.

A weekly notification and reference service providing comprehensive coverage of current legislative, administrative, and industrial developments in pollution control and environmental protection. Consists of six sections in loose-leaf binder.

Hanson, Herbert C. Dictionary of ecology. New York, Philosophical Library, 1962. Out of print.

For use of students, teachers, researchers and general public. Aim is not "final fixity" of definition but rather "clear, concise statement indicating present-day usage."

National Wildlife Federation. Conservation Directory. Published by the National Wildlife Federation, 1412 16th Street, N.W., Washington, D. C., 20036. \$1.50 paperback.

Listing of principal national and state organizations, public and private.

AUTHOR:	Page	AUTHOR:	Page
Abbey, Edward	26	De Bell, Garrett	1
Adams, Ansel	10	Degler, Stanley E.	12
Allen, Durwood L.	37	Dobzhansky, Theodosius	7
Allen, Shirley W.	31	Douglas, William O.	1
American Assembly	17	Dubos, Rene	1, 7
Appleman, Philip	17	Duell, Roy P.	37
Aylesworth, Thomas F.	10	Eckbo, Garrett	4
Bardach, John	6, 33	Edelson, Edward	12
Bates, Marston	6, 18	Ehrlich, Paul R.	19
Battan, Louis J.	10	Ekirch, Arthur	28
Baumann, Ruth	26	Elton, Charles S.	7
Bell, Daniel	23	Esposito, John	12
Benarde, Melvin A.	18	Evans, Howard E.	7
Bennet, Hugh H.	32	Fagley, Richard M.	19
Blake, Peter	10	Faltermayer, E.	4
Borgstrom, Georg	18	Farb, Peter	7
Boston, Robert C.	26	Faulkner, Edward H.	28
Boyle, Robert	10	Fisher, James	38
Bregman, Jack	10	Forbes, R. J.	24
Brockman, Christian F.	26	Fowler, Eric B.	24
Bronson, William	15	Frankel, Lillian B.	20
Brower, David	26, 27	Freedman, Ronald	20
Brown, Harrison	23	Frome, Michel	28
Brown, Lester	23	Furon, Raymond	33
Bullards, O.	11	Gabrielson, Ira N.	38
Burton, Ian	32	Gaillard, M. Wilson	28
Calder, Nigel	23	Galbraith, John K.	16
Calder, Ritchie	18, 23	Goldman, Marshall I.	12
Callison, Charles H.	32	Goldstein, Jerome	13
Carhart, Arthur H.	27, 32	Graham, Frank	13
Carr, Donald E.	11	Grossman, Mary L.	38
Carson, Rachel	11	Gullion, Edmund A.	33
Carstensen, Vernon	27	Hanson, Herbert C.	43
Caudhill, Harry	15	Hardin, Garrett	7, 20
Cepede, Michel	18	Harrar, Jacob G.	20
Citizen's Advisory Committee on Environmental Quality	27	Hay, J.	28
Clark, Colin	19	Helfrich, Harold W.	2
Clarke, Arthur C.	32	Herber, Louis	2, 4
Clarke, Robin	24	Herfindahl, Orris C.	2
Clawson, Marion	27	Hickey, J. J.	38
Clepper, Henry E.	27, 32	Hocking, B.	8
Cleveland, Frederick N.	4	Hubbard, Alice H.	29
Cloud, Preston	33	Huth, Hans	29
Cochrane, Williard W.	19	Huxley, Julian S.	25
Coles, Robert	15	Izaak Walton League of America ..	29
Commoner, Barry	24	Jacobs, Jane	4
Cook, Robert C.	19	Jarrett, Henry	33
Cooley, Richard A.	4, 15, 28	Jones, Mervyn	20
Costello, David F.	37	Kilgore, Bruce M.	29
Cowan, Edward	11	Kormanly, Edward J.	8
Curtis, Richard	24	Kostelanetz, Richard	25
Dales, John H.	11	Krutch, Joseph Wood	8
Darling, Frank F.	24, 28	Lader, Lawrence	20
Dasmann, Raymond F. ...	1, 6, 16, 37	Laffin, John	20
Day, Lincoln H.	16	Laycock, George	38
		League of Women Voters	29

AUTHOR:	Page	AUTHOR:	Page
Leinwand, Gerald	4, 13	Rose, S.	25
Leopold, Aldo	36	Rudd, Robert L.	14
Lewis, Alfred	13	Russell, W. M. S.	2
Lewis, Howard R.	13	Sauer, Carl O.	36
Leydet, Francois	29	Sax, Karl	22
Lindsay, John V.	5	Schuhmacher, Eugen	39
Linton, Ron	2	Schwartz, William	31
Little, Charles E.	29	<u>Scientific American</u>	5, 35
Lowenthal, D.	8	Sears, Paul B.	9, 36
McCarthy, Richard D.	25	Seligman, Ben	17
McClellan, Grant S.	2	Shelford, Victor E.	9
McHarg, Ian	5	Shepard, Paul	3
Malthus, Thomas	21	Shurcliff, William A.	25
Marine, Gene	16	Smith, David T.	22
Marquis, Ralph W.	33	Smith, Frank E.	31
Marx, Wesley	34	Smithsonian Institution	3
Matthiessen, Peter	39	Stewart, George R.	14
Melman, Seymour	16	Still, Henry	14
Milne, Lorus	8, 34	Stockwell, E. G.	22
Mitchell, John G.	30	Storer, John H.	9
Moomaw, I.	21	Street, Philip	39
Moorehead, Alan	39	Swift, Ernest F.	31
Morris, Desmond	8	Task Force on Environmental Education & Youth Activities	3
Moss, Frank E.	34	Tillet, Paul	39
Mowbray, A. Q.	5	Trefethen, James B.	40
Mumford, Lewis	5	Udall, Stewart L.	3
Murphy, Earle F.	34	United Nations	25
Nash, Roderick	30	U.S. Dept. of Agriculture	36
National Staff of Environmental Action	34	U.S. Dept. of the Interior 14,22,26,31	36
National Wildlife Federation ...	43	U.S. Water Resource Council ...	36
Netboy, A.	39	Wagner, Philip L.	10
Niering, William A.	39	Wallia, C.	26
Nikolaieff, George A.	34	Wengert, Norman	37
Novick, Sheldon	25	Whittan, Jamie L.	14
O'Brien, J. A.	21	Whyte, William H.	5
Odum, Eugene	9	Wilson, Charles M.	22
Ordway, Samuel H.	35	Wilson, James Q.	6
Osborn, Fairfield	21, 35	Wise, William	15
Overman, Michael	35	Wood, Samuel E.	17
Packard, Vance	16	Wright, Jim	37
Paddock, William	21	Young, Louise B.	22
Parson, Rubin L.	35	Zurhorst, Charles	31
Perry, John	14		
Pinchot, Gifford	30		
President's Committee on Population and Family Planning	21		
President's Council on Recreation and Natural Beauty	17		
President's Science Advisory Committee	14		
Quinn, Francis X.	22		
Rienow, Robert	2		
Robbins, Roy M.	30		
Roosevelt, Nicholas	30		