This guide identifies resources for ecology and the natural sciences including entomology, herpetology, ichthyology, ornithology, and water science.

Dataets for Ecology & Natural Resources

Sage Publishing's 'Green' series

Historical Sources

Related Guides

Environmental Studies Resources
Mathematical Biology Research Guide
Forestry Research Guide
Endangered and Invasive Species Research Guide
Charles Darwin Research Guide
Parks, Recreation, and Leisure
Water Resources
Red Cedar River and Watershed

Research Assistance

Biological Science Careers Resources
Choosing the Appropriate Biology Literature Database
Environmental Statistics (including Michigan)
Library Resources for Biostatistics
Primary Sources in the Sciences
Researching Controversial Topics in Biotechnology

Dataset

Datasets and Data Management - UMBS
The University of Michigan Biological Station (UMBS) has datasets accessible on topics such as forestry, GIS, climate, terrestrial and aquatic plants, animals, and more.
According to EBSCO, Environment Complete™ offers deep coverage in applicable areas of agriculture, ecosystem ecology, energy, renewable energy sources, natural resources, marine & freshwater science, geography, pollution & waste management, environmental technology, environmental law, public policy, social impacts, urban planning, and more. Environment Complete contains more than 1,957,000 records from more than 1,700 domestic and international titles going back to the 1940s (including 1,125 active core titles) as well as more than 120 monographs. The database also contains full text for more than 680 journals, including many of the most used journals in the discipline, such as Environment (back to 1975), Ecologist, Conservation Biology, etc. Additionally, Environment Complete provides full text for 120 monographs, such as Encyclopedia of World Environmental History (3 volumes), Advances in Water Treatment & Environmental Management, etc.

Wildlife & Ecology Studies Worldwide™ (1935 & earlier to the present), is the world's largest index to literature on wild mammals, birds, reptiles, and amphibians. Coverage includes more than 670,388 bibliographic records many of which include abstracts. Most of the records in this database are from Wildlife Review Abstracts, formerly Wildlife Review, which until 1996 was a print publication produced by the U.S. National Biological Service.

CAB Abstracts

CAB covers the subject of agriculture in the broadest sense. It includes: agronomy, biotechnology, crop protection, dairy science, economics, environmental degradation and remediation, forestry, genetics, herbicides, irrigation, leisure, recreation and tourism, microbiology, nutrition, parasitology, rural development, veterinary medicine and much more. Journals, monographs, conferences, books, annual reports and other sources from more than one country are scanned regularly for inclusion in the database.

BioOne Complete

BioOne launched its original aggregation, BioOne.1, with 40 titles in 2001. In January 2007 BioOne added BioOne.2, a complementary collection of 40 new titles. Now at maturity, BioOne Complete about 200 high-impact publications. BioOne.1 provides the scholarly community with a must-have collection of critical, high-quality titles across the biological, ecological, and environmental sciences.

Web of Science

Includes the Institute for Scientific Information Citation Indexes - Arts and Humanities, Social Science, and Science. It indexes science, social sciences, and arts and humanities information from nearly 9,300 of the most prestigious, high impact research journals in the world.

GreenFILE

GreenFILE offers well-researched but accessible information covering all aspects of human impact on the environment. Its collection of scholarly, government and general-interest titles include content on the environmental effects of individuals, corporations and local/national governments, and what can be done on each level to minimize negative impact. Topics covered include global warming, green building, pollution, sustainable agriculture, renewable energy, recycling, and more. GreenFILE is multidisciplinary by nature and draws on the connections between the environment and a variety of disciplines such as agriculture, education, law, health and technology. The database provides indexing and abstracts for approximately 295,000 records, as well as Open Access full text for more than 4,600 records. Coverage: 1973 to present. Ebsohost platform.

GREENR

Gale's new eco-focused online portal to information on the environment, energy and sustainable development. By using GREENR, students and faculty can find global news and views, video, background information, statistics and more concerning environmental issues. Updated daily.

GeoRef

GeoRef, produced by the American Geological Institute, indexes the world's literature in geology and the geosciences. Its over 1.7 million citations, many with abstracts, cover the geology of North America since 1785 and the geology of the rest of the world since 1933. It scans over 3,000 journals in 40 languages as well as books, maps, and reports. Most U.S. Geological Survey publications and many state geological surveys are indexed, as are U.S. and Canadian theses and dissertations.

General Science Full Text

Provides full text from more than 100 periodicals dating as far back as 1995, in addition to indexing and abstracts for nearly 300 periodicals dating back to 1984. Subject coverage includes astronomy, biology, botany, chemistry, conservation, health & medicine, oceanography, physics, zoology and much more.

Applied Science & Technology Full Text

Contains indexing and abstracts for nearly 800 core English-language, scientific and technical publications back to 1983. Full text of articles is available from more than 220 periodicals dating back to 1997. Content includes coverage of a wide variety of applied science specialties—acoustics to aeronautics, neural networks to nuclear and civil engineering, computers and informatics and much more.

DUCKDATA

DUCKDATA provides a comprehensive bibliography of published literature on the ecology, conservation, and management of North American waterfowl and their wetland habitats. It contains 14,913 records. The primary objective of DUCKDATA is to provide access to the extensive literature concerning North American waterfowl, including references emphasizing wetlands but having implications for waterfowl ecology, conservation, and management.

Ducks Unlimited Conservation and Recreation Lands

CARL (Conservation And Recreation Lands) is a GIS (Geographic Information Systems) layer that contains information on conservation and recreation lands in the Great Lakes. It can be used in conjunction with other GIS layers for developing landscape and long-term planning perspectives for conservation activities. CARL was developed by incorporating existing GIS layers with hard-copy maps and online information.

Species in Parks: Flora and Fauna Databases

The Information Center for the Environment, in conjunction with the National Park Service, developed preliminary databases of plant and vertebrate animal species reported to occur within lands managed by the U.S. National Park Service. These databases standardize both structure and content.

eFloras

Detailed descriptions of plants in a database searchable by taxa.
Historical Sources

- **American Environmental Photographs, 1891-1936**
  This collection consists of approximately 4,500 photographs documenting natural environments, ecologies, and plant communities in the United States at the end of the nineteenth and the beginning of the twentieth century. Produced between 1891 and 1936 by a group of American botanists generally regarded as one of the most influential in the development of modern ecological studies, these photographs provide an overview of important representative natural landscapes across the nation. The photographs were taken by Henry Chandler Cowles (1869-1939), George Damon Fuller (1869-1961), and other Chicago ecologists on field trips across the North American continent.

- **Early Encounters in North America: Peoples, Cultures, and the Environment**
  This collection documents the relationships among peoples and the environment in North America from 1534 to 1850. The collection includes both published and unpublished accounts, narratives, diaries, journals, and letters.

- **Environmental Issues: Essential Primary Sources**
  "Contains approximately 175 full or excerpted documents—speeches, legislation, magazine and newspaper articles, essays, memoirs, letters, interviews, novels, songs, and works of art—as well as overview information that places each document in context."

- **Evolution of the Conservation Movement: 1850-1920**
  The Evolution of the Conservation Movement, 1850-1920, documents the historical formation and cultural foundations of the movement to conserve and protect America's natural heritage, through books, pamphlets, government documents, manuscripts, prints, photographs, and motion picture footage drawn from the collections of the Library of Congress. The collection consists of 62 books and pamphlets, 140 Federal statutes and Congressional resolutions, 34 additional legislative documents, excerpts from the Congressional Globe and the Congressional Record, 360 Presidential proclamations, 170 prints and photographs, 2 historic manuscripts, and 2 motion pictures.

- **Three journals of the Lewis & Clark expedition, 1804-1806 : from the collections of the American Philosophical Society**

- **Three Years Travels through the Interior Parts of North America [Carver's Travels]**
  Philadelphia: Key & Simpson, 1796.
  Descriptions of lakeside Michigan and Description of Lake Erie, Lake Huron, and Detroit.

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Sage Publishing's 'Green' series [ebooks]

  2011 eBook. Via 150 signed entries, Green Business: An A-to-Z Guide provides an overview of key principles, approaches, strategies, and tools that businesses have used to reduce environmental impacts and contribute to sustainability. Entries reflect the expertise of scholars and practitioners from varied fields and provide references to other entries as well as citations for further reading. Together, they provide an understanding of green business practices that will be valuable for managers, policymakers, students, scholars, and citizens interested in the complex relationship between businesses and the environment. Vivid photos, searchable hyperlinks, numerous cross references, an extensive resource guide, and a clear, accessible writing style make the Green Society volumes ideal for classroom use. Platform: Sage.

- **Green Cities by Nevin Cohen (Editor)**
  ISBN: 9781412996822
  Publication Date: 2010-05-04
  2011 Ebook. Green Cities provides an overview of the key concepts that urban planners, policy makers, architects, engineers, and developers use to understand the sustainability dimensions of the urban environment. It identifies cities that have taken steps to become greener and discusses the strategies they have used; it also reviews broad concepts associated with green cities. Cities face enormous environmental challenges, and the entries in this volume, from case studies of greener cities to discussions of green urban design, infrastructure, and processes, can help us transform our cities into healthier, sustainable communities in which a growing urban population can thrive. Platform: Sage.

- **Green Consumerism: An A-to-Z Guide by Paul Robbins**
  Call Number: GB196 .G785 2011 Online
  Publication Date: 2011
  2011 eBook. Green Consumerism offers a wide-ranging examination of green consumerism, one reflecting the diversity of views and debates surrounding the concept. The multiplicity of topics and disciplinary perspectives provides a useful survey of the nature of green consumerism, the forms it takes, the issues impacting it, and the practices it involves. Contributing authors also provide insights into the social and spatial constitution of green consumerism, its multifaceted and sometimes contested contours, and the ways it is embedded and shaped in relation to wider cultural, economic, political and environmental processes. Readers will derive a sense not only of what green consumerism has become, but more critically, how it might evolve, addressing both limitations and possibilities for real and meaningful change. Platform: Sage.

- **Green Culture: An A-to-Z Guide by Kevin Wehr (Editor); J. Geoffrey Golson (Editor)**
  Call Number: GE196 .G74 2011 Online
  ISBN: 9781412975711
  Publication Date: 2011-06-01
  2011 eBook. Green Culture explores the on-going paradigm shift in culture and lifestyles toward promoting a sustainable environment. After years of discussion about the environment dating back to the 1960s counter-culture, the recent explosion of green initiatives has induced the general public to embrace all things green, from recycling in the home to admiring green celebrities. This volume assesses the green cultural transformations by presenting some 150 articles of importance to students of sociology, history, political science, communications, public relations, anthropology, literature, arts and drama. Presented in A-to-Z format, the articles include appealing topics from green Hollywood to green spirituality, green art, and green restaurants. Platform: Sage.

In Green Ethics and Philosophy: An A-to-Z Guide, Julie Newman (Editor) explores the moral relationship between humans and their natural environment, specifically targeting the contemporary green movement. Since the 1960s, green ethics and philosophies have helped give birth to the civil rights, feminist, and gay rights movements, as well as contemporary environmentalism. With a primary focus on green environmental ethics, this reference work, available in both print and electronic formats, presents approximately 150 signed entries organized A-to-Z, traversing a wide range of curricular disciplines, including philosophy, psychology, business, economics, religion, and political science. A rich blend of topics, from the Hannover Principle to green eco-feminism, responsible eco-tourism, corporate values and sustainability, and more, are explained by university professors and scholars, all contributing to an outstanding reference mainly for academic and public libraries. Platform: Sage.

Green Food: An A-to-Z Guide by Dustin Mulvaney (Editor) is a valuable tool for students of all facets of ecology, the environment, and sustainable development. Green Issues and Debates explores the multitude of threats to sustainable life on earth and the myriad of controversies surrounding potential solutions. The gray shades of green are deeply examined, including such heady questions as: Is ethanol production from corn a recipe for famine? Does offshore drilling pose more of a risk to the environment than the problem it solves? Is “clean coal” a viable option or is it simply polluting the energy dilemma? Are genetically modified foods helpful or harmful? Well-respected scholars present more than 150 articles presented in A-to-Z format focusing on issues brought to the forefront by the green movement with carefully balanced pro and con viewpoints. Platform: Sage.

Green Health: An A-to-Z Guide by Oladele Ogunseitan (Editor) examines the green movement within the contexts of personal health and the healthcare industry, focusing on consumer lifestyles and how they affect resource conservation, pollution prevention, and environmental management. The scope of the title involves the societal goals of protecting human health and reducing the ecological footprint of healthcare. With approximately 150 signed entries written from global viewpoints by university professors and experts, Green Health: An A-to-Z Guide explores topics ranging from ecologically sustainable pharmaceuticals to the health risks of fossil fuels, biological stressors, the precautionary principle and wellness, organic food and health, hazardous waste, drinking water, the greening of healthcare, and more. Vivid photographs, searchable hyperlinks, numerous cross references, an extensive resource guide, and a clear, accessible writing style make the Green Society volumes ideal for classroom use as well as for research.

Green Energy: An A-to-Z Guide by Dustin Mulvaney (Editor) provides an overview of the social and environmental dimensions of our energy system, and the key organizations, policy tools, and technologies that can help shape a green-energy economy. Each entry draws on scholarship from across numerous social sciences, natural and physical sciences, and engineering. The urgency of climate change underscores the importance of getting the right technologies, policies and incentives, and social checks-and-balances in place. This reference resource will prepare those with a sparking interest in the topic to participate in what will hopefully become an equitable and intergenerational conversation about the impacts of our energy consumption and how to make it cleaner and greener. Platform: Sage.

Green Education: An A-to-Z Guide targets the contemporary green movement. Since the 1960s, green ethics and philosophies have helped give birth to the civil rights, feminist, and gay rights movements, as well as contemporary environmentalism. With a primary focus on green environmental ethics, this reference work, available in both print and electronic formats, presents approximately 150 signed entries organized A-to-Z, traversing a wide range of curricular disciplines, including philosophy, psychology, business, economics, religion, and political science. A rich blend of topics, from the Hannover Principle to green eco-feminism, responsible eco-tourism, corporate values and sustainability, and more, are explained by university professors and scholars, all contributing to an outstanding reference mainly for academic and public libraries. Platform: Sage.
The Research and Development Institute of Ecology and the Sustainable Use of Natural Resources, LLC, or Research institute of Ecology, the abbreviation is the RSI — a company from Tyumen specializes in development of innovation technologies in the field of environmental protection and nature conservation. [3]. [8] [22] The staff of the laboratory of the Research Institute of Ecology and Natural Resources Management of the TSU patented the consortium of oil eating microbes Arthrobacter Oxydans-091 and Pseudomonas putida, [8] but the RU 2275466 C1 patent put out of action in 2007. [23] Therefore, the authors Victor Ryadinskiy and Julia Deneko applied for the new patent (RU 2431017 C1 patent) in 2010.

Environment and Ecology Research is an international peer-reviewed journal that publishes original and high-quality research papers in all areas of environment and ecology. As an important academic exchange platform, scientists and researchers can know the most up-to-date academic trends and seek valuable primary sources for reference. ISSN: 2331-625X (Print).

Lan Hong School of Environmental and Natural Resource, Renmin University of China, China. Dr. Dan McCarthy Department of Environment and Resource Studies, Waterloo Institute for Social Innovation and Resilience, University of Waterloo, Canada. Dr. Tsang Po Keung Department of Science and Environmental Studies, The Hong Kong Institute of Education, Hong Kong. Ecology is a science that studies the patterns of interaction between organisms and their habitat, the laws of development and existence of biogeocenoses as complexes of interacting living and non-living components in different parts of the biosphere. The word ecology as already mentioned in the preface, was first used by German biologist Ernst Haeckel, having designated to them the biological science that studies the relationship of organisms with the environment. The basis of all human activity, the source of the resources of its economy is the nature surrounding us. At present, ecology has acquired an interdisciplinary, general scientific value and received the status of a universal ecology.