

# Guide to Online Resources for the Conservationist

14

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We hope the information included here will assist those working for the conservation of water, soil, woods, air and wildlife. Please contact us if you know of any additions/corrections or wish to receive supplemental information:

Internet mail: danlw@well.sf.ca.us or jsc@igc.apc.org; Coin of the Realm BBS: Tools for Knowledgeworkers: 301/585-6697 (8-N-1, Silver Spring, MD, USA); FidoNet address: 1:109/475.

## TABLE OF CONTENTS

1. Introduction to Resources
2. Internet/BITNET/USENET Resources
3. Non-Internet Resources
4. Selected References

## PREFACE

The question is often asked whether the technology for connecting computers has matured to a point where conservationists with no advanced computer skills can use online resources to do "real work."

This is a question about what computers are becoming because of technology. However, a question that is equally valid is what can we become because of technology; the first anticipates a moment in time, the second puts the value of technology on a continuum. The proper mix is what is required; both computers and human beings are information processing mechanisms that manipulate data; the human skills of judgement, analysis, prioritizing, etc. The answer to the second question has always been yes, and as time goes on more people will be saying yes more often, that online resources in conservation can be used for real work.

Readers who have attempted to install an internal modem or those just learning to use an IP (Internet Protocol) connection to the Internet, because it can still be pretty difficult to get started. But ease of use is increasing, through software like Cello and Mosaic for Internet TCP/IP connections (Transmission Control Protocol/Internet Protocol—a higher level of service than IP), the client software available for America Online, CompuServe and other commercial services, and RIP (Remote Imaging Protocol) graphics in the computer Bulletin Board System world.

The first credible call that "the time has come," for "real work," to be done through such instant communication probably came from Samuel F. B. Morse in 1832. "I see no reason," he said, "why intelligence might not be instantaneously transmitted by electricity to any distance." His telegraph could move a page of text in a mere few minutes. Now we are beginning to see data connections that can move the entire set of Encyclopaedia Britannica in one second.

And so the call is made once again, this time for participation in an online community of work that includes databases, electronic mail conferences with hundreds or thousands of participants, various electronic publications, and other resources that do indeed, when accompanied by knowledge of the medium and wise use of time and money resources, help to accomplish real work.

In the interest of brevity and time we have attempted to restrict the discussion as much as possible to resources not covered by other authors, and to distinguish the differences among types of resources. See the References in part 4 for more information about Don Rittner's book *EcoLinking*, Judy Trimarchi's "Environmental and Related BBS List," Bob Chapman's "GreenNet (tm) Green BBS List for Environmental Bulletin Board Systems," and Una Smith's "A Biologist's Guide to Internet Resources."

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## BITNET/INTERNET LISTS

### ACTNOW-L

LISTSERVER (Internet): **LISTSERV@BROWNVM.BITNET**

LISTSERVER (BITNET): **LISTSERV@BROWNVM**

Description: "the College Activism/Information list (ACTNOW-L)."

### AG-EXP-L

LISTSERVER (Internet): **LISTSERV%NDSUVM1.BITNET@CUNYVM.CUNY.EDU**

LISTSERVER (BITNET): **LISTSERV@NDSUVM1**

Moderator: Sandy Sprafka

Description: "Discusses the use of Expert Systems in Agricultural production and management. Primary emphasis is for practitioners, Extension personnel and Experiment Station researchers in the land grant system."

### AQUA-L

LISTSERVER (Internet): **LISTSERV%VM.UoGuelph.CA@VM1.NoDak.EDU**

LISTSERVER (BITNET): **LISTSERV@UOGUELPH**

Moderator: T. B. (Ted) White

Description: "The purpose of the list is to promote discussion amongst individuals interested in the science, technology and business of rearing aquatic species. In the spirit of open discussion, membership in the list is public and unrestricted. Potential topics include: Problems and solutions rearing aquatic larvae, Diseases, parasites and pathology, Water quality, Recirculation technology and applications, Research aquatic systems design and operation, Commercial aquatic systems design and operation, Site selection and environmental impact, New species under culture, Genetics, sex reversal and hormonal manipulation, Computers in aquaculture, Public perceptions of aquaculture, Aqua-business (\$\$\$\$)"

### BEE-L

LISTSERVER (Internet): **LISTSERV%ALBNYVM1.BITNET@CUNYVM.CUNY.EDU**

LISTSERVER (BITNET): **LISTSERV@ALBNYVM1**

Description: "BEE-L is for the discussion of research and information concerning the biology of bees. This includes honey bees and other bees (and maybe even wasps). We communicate about sociobiology, behavior, ecology, adaptation/evolution, genetics, taxonomy, physiology, pollination, and flower nectar and pollen production of bees."

### BIO-SOFT

LISTSERVER (Internet): **biosci%net.bio.net@VM1.NODAK.EDU**

LISTSERVER (BITNET): **biosci@net.bio.net**

Moderator: Dave Kristofferson

Description: "Questions, answers, and discussions are welcomed about software related to the biological sciences (or even about problems with other software that scientists might use in the course of their work such as word processors or communications software)."

### BIODIV-L

LISTSERVER (Internet): **LISTSERV@bdt.ftpt.br**

Description: The intention of this list is to discuss technical opportunities, administrative and economic issues, practical limitations and scientific goals, leading to recommendations for the establishment of a biodiversity information network. For more information, contact: **dora@bdt.ftpt.br**

### BIOSPH-L

LISTSERVER (Internet): **LISTSERV%UBVM.BITNET@VM1.NODAK.EDU**

LISTSERVER (BITNET): **LISTSERV@UBVM**

Moderator: Dave Phillips

Description: The BIOSPH-L list is concerned with "Anything relating to the biosphere, pollution, CO-2 effect, ecology, habitats, climate, etc., . . . Basically anything that exerts an influence of some kind or another on the BioSphere." BIOSPH-L is one of the best lists we have found, averaging about four good messages a day. Its activity reflects the enthusiasm of BIOSPH-L's subscribers; besides an active discussion, several users upload press releases and articles.

### BIRDEAST

### BIRDWEST

### BIRDCNTR

LISTSERVER (Internet): **LISTSERV%ARIZVM1.BITNET@CORNELL.CIT.CORNELL.EDU**

LISTSERVER (BITNET): **LISTSERV@ARIZVM1**

Moderator: Charles B. Williamson and Norman C. Saunders

Description: "The three new lists, which replace the former **BIRD\_RBA@ARIZVM1**, provide a clearing-house for transcribed birding hotlines for three major areas of the country—East, West, and Central. The new lists are **BIRDEAST**, **BIRDCNTR**, and **BIRDWEST**. New subscribers must choose which of the three regional lists best answers their needs. Of course, new subscribers may still subscribe to all three lists for full coverage. Please note that these are not intended to be general chat lists. Contributions should either be transcripts of birding hotlines or, if a local hotline recording is not available to you, concise statements of species seen and the location of the sighting, along with any real information such as 'out of range,' 'out of normal time frame,' etc. The following states are currently represented with transcribed hotlines on the three regional lists: **BIRDEAST**: Maine, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia and Virginia. **BIRDCNTR**: Ohio, Indiana, Michigan and Texas. **BIRDWEST**: New Mexico, Arizona, and California."

### BITNEWS

LISTSERVER (Internet): **LISTSERV%BITNIC.BITNET@CUNYVM.CUNY.EDU**

LISTSERVER (BITNET): **LISTSERV@BITNIC**

Editors: Judith Molka and Patricia Noeth

Description: "BITNEWS is the official medium of the BITNET Network Information Center for distributing BITNET news and administrative developments." This is a subscription to the Bitnews newsletter, not a discussion list!

### BNFNET-L

LISTSERVER (Internet): **LISTSERV@FINHUTC.BITNET**

LISTSERVER (BITNET): **LISTSERV@FINHUTC**

Moderators: Eng-leong FOO and Robert HARPER



Description: "BNFNET-MIRCEN" was established in 1990 by UNESCO's MIRCEN (Microbiological Resource Center) Network for Environmental, Applied Microbiological and Biotechnological Research for people who have a professional interest in biological nitrogen fixation (BNF). Members of BNFNET-MIRCEN primarily use computers to communicate with each other by electronic mail ("e-mail"). The members of BNFNET-I have grouped themselves into the following 6 discussion groups: Legume-Rhizobium Group, Nitrogen Fixing Trees Group, Genetics/Biochemistry Group, Free-living Fixers Group, Culture Collections Group, and the Computer Networking Group

### CERRO-L

LISTSERVER (Internet): **LISTSERV@aearn.edvz.uni-linz.ac.at**

LISTSERVER (BITNET): **LISTSERV@AEARN**

Moderator: Gunther Maier

Description: "CERRO-L is a list discussing issues of relevance to regional development and regional development research in Central Europe. CERRO-L discusses topics from a broad range of related disciplines: regional science, economic geography, regional and urban planning, environmental economics, regional sociology, policy analysis, regional political economy and institutions, etc. It is the intention of CERRO-L to stimulate and support regional research in and about the newly re-emerging region of "Central Europe" and to enhance contacts and discussion between researchers and scholars interested in these areas."

### CLASS-L

LISTSERVER (Internet): **LISTSERV%SBCCVM.BITNET@CUNYVM.CUNY.EDU**

LISTSERVER (BITNET): **LISTSERV@SBCCVM**

Moderators: Bill Day and Jim Rohlf

Description: "Mailing list and file server for researchers in classification, clustering, phylogenetic estimation, and related areas of data analysis. CLASS-L provides facilities to: Enable researchers to mail messages automatically to all subscribers, Provide researchers with announcements, newsletters, and information about classification and clustering."

### CONSLINK

LISTSERVER (Internet): **LISTSERV@SIVM.SI.EDU**

LISTSERVER (BITNET): **LISTSERV@SIVM**

Moderator: Michael Stuewe

Description: CONSLINK is "a BITNET-Based Electronic Conference and Bulletin Board on all Topics of Biology Conservation" supported by the Smithsonian Institution. "Topics of general interest include dates of conferences, symposia, and workshops; new publications; grants and positions that have become available." (See the separate heading for CONSLINK for other files and services available through of this resource.)

### ECONOMY

LISTSERVER (Internet): **LISTSERV@TECMTYVM.MTY.ITESM.MX**

LISTSERVER (BITNET): **LISTSERV@TECMTYVM**

Moderator: Alejandro Ibarra

Description: "The economy and economic problems of Less Developed Countries (LDCs) have become real laboratories for both the economic discipline, and economic policy measures. This discussion list is aimed at analyzing economic problems, theories, policies, social conditions, political settings, etc., of LDCs and their relationship with the industrial world."

### ENVBEH-L

LISTSERVER (Internet): **LISTSERV%POLYGRAF.BITNET@MITVMA.MIT.EDU**

LISTSERVER (BITNET): **LISTSERV@POLYGRAF**

Moderators: Richard Wener and Tony Monteiro

Description: "Mailing list on Environmental Behavior: Environment, Design, and Human Behavior. ENVBEH-L is a discussion on a variety of topics concerning the relations of people and their physical environments, including architectural and interior design and human behavior, environmental stress (pollution, catastrophe) and behavior, human response to built and natural settings, etc."

### ENVST-L

LISTSERVER (Internet): **LISTSERV@BROWNVN.BITNET**

LISTSERVER (BITNET): **LISTSERV@BROWNVN**

Moderator: Sandra Baptista

Description: The purpose of this list is to exchange information about Environmental Studies (ES) programs, generally—about course designs, successful student projects, important information sources, etc. We invite all who have a serious interest in ES at the undergraduate and graduate levels. Some topics that might be of interest are: the balance between science/social science/humanities in our degrees; the role of project classes and individual applied projects in our programs; our relations with more traditional departments and disciplines; and even exciting new ideas that we would like to refine.

### ETHOLOGY

LISTSERVER (Internet): **LISTSERV%FINHUTC.BITNET@CUNYVM.CUNY.EDU**

LISTSERVER (BITNET): **LISTSERV@FINHUTC**

Moderator: Jarmo Saarikko

Description: "A mailing list for the discussion of animal behaviour and behavioural ecology. Possible topics could be e.g., new or controversial theories, new research methods, and equipment. Announcements of books, papers, conferences, new software for behavioural analysis etc., are also encouraged."

### EV-L

LISTSERVER (Internet): **LISTSERV@SJSUVM1.SJSU.EDU**

LISTSERVER (BITNET): **LISTSERV@SJSUVM1**

Moderator: Clyde R. Visser

Description: The EV Electric Vehicle list is intended to provide a forum to discuss the current state of the art and future direction of electric vehicles. It is not intended to discuss either EV appropriateness or comparisons with other transportation—those discussions are best relegated to the appropriate news group.

### FMDSS-L

LISTSERVER (Internet): **LISTSERV@PNFI.FORESTRY.CA**

Moderator: Tom Moore

Description: "The [Forest Management Decision Support Systems] discussion group is a forum for rapid exchange of information, ideas, and opinions related to the topics of decision support systems and information systems for forest management planning. The operation of this list is sponsored by the Forest Management Decision Support Systems Initiative of Canada's Green Plan.

### GARDENS

LISTSERVER (Internet): **LISTSERV@UKCC.UKY.EDU**

LISTSERVER (BITNET): **LISTSERV@UKCC**

Moderators: Bob Crovo and Marguerite Floyd

Description: "The purpose of Gardens & Gardening is to promote and exchange information about home gardening. Everyone is welcome to participate, especially the novice gardener. Topics will include vegetable gardens, herbs, flowers, ornamental gardening, container gardening, and so on. Since this is such a broad topic, we may, at a later date, divide the list into various groups, such as indoor and outdoor gardening."

### GovDoc-L

LISTSERVER (Internet): **LISTSERV%PSUVM.BITNET@VM1.NODAK.EDU**

LISTSERVER (BITNET): **LISTSERV@PSUVM**

Moderators: Diane Kovacs and Michael J. Kovacs

Description: "Mailing list with a focus is specifically on issues of information dissemination through Federal Depository Libraries. Issues to be discussed include: electronic dissemination policies of the Government Printing Office(GPO), the 1990 Census, access to Federal documents (Freedom of Information Act issues), automation of document collections in libraries (Marcive v. OCLC tapes; database consideration; retrospective conversion; etc.), document end user education and legislation related to depository libraries. United Nations, State and Foreign Government documents can be included for discussion."

## GREEN

LISTSERVER (Internet): **LISTSERV@INDYCMS.IUPUI.EDU**

LISTSERVER (BITNET): **LISTSERV@INDYCMS**

Moderator: John B Harlan

Description: "Green is dedicated to the study of Green movements worldwide and their influence on public opinion and public policy. The scope of the list's discussion is global: all Green movements, at every level are of interest to this list. Of special interest to the list is the emerging Green movement in the US—how it is being organized by various competing elements, how it is being influenced by other Green movements worldwide (especially European), how it is interacting with those movements, and how it is influencing American public opinion and public policy on the local, state, regional and national level. It is emphasized that the purpose of Green is the *study* of Green movements. Green is *not* a tool for organizing or promoting those movements. In keeping with policies defining the appropriate use of academic networks (which often include prohibitions on explicit political activism), adherence to the stated purpose of this list is strictly monitored and enforced."

## HUMBIO-L

LISTSERVER (Internet): **HUMBIO-REQUEST@ACC.FAU.EDU**

LISTSERVER (BITNET): **HUMBIO-REQUEST@FAUVAX**

Moderator: M.Y. Iscan and Ralph P Carpenter

Description: "Humbio-L is an unmoderated discussion list dealing with biological anthropology, adaptation, environmental stress, biological race, growth, genetics, paleoanthropology, skeletal biology, forensic anthropology, paleodemography, paleopathology, primate biology & behavior. To subscribe send mail to HUMBIO-REQUEST@FAUVAX (Internet users send to HUMBIO-REQUEST@ACC.FAU.EDU) with the request in the message body: SUBSCRIBE HUMBIO-L Your\_full\_name."

## MARINE-L

LISTSERVER (Internet): **LISTSERV@UOGUELPH.BITNET**

LISTSERVER (BITNET): **LISTSERV@UOGUELPH**

Moderator: Melcir Erskine-Richmond and Ted White

Description: "MARINE-L is an open Forum for the discussion and development of Marine-related Studies, and Semester-at-Sea/Education-at-Sea programs, including the development of e-mail connectivity at sea."

## ORCHIDS

LISTSERVER (Internet): **MAILSERV%SCU.BITNET@CUNYVM.CUNY.EDU (see below)**

LISTSERVER (BITNET): **MAILSERV@SCU**

Coordinator: Willis Dair

Description: "This unmoderated list was created to share and discuss information and experiences of orchid growers. Send a mail message (MAIL only) to MAILSERV%SCU.BITNET@CUNYVM.CUNY.EDU The first line of the message should include the TEXT line: SUBSCRIBE ORCHIDS"

## POP-BIO

LISTSERVER (BITNET): **LISTSERV@IRLEARN**

Moderator: Vincent Bauchau

Description: Population Biology is a synthesis of population ecology and population genetics, pursuing a unified theory to explain the structure, functioning and evolution of populations of living beings. Such populations are very complex systems, exhibiting a variety of phenomena that we still do not master. Just to quote a famous example, multiannual density cycles (e.g., in lemmings) have not received a satisfac-

tory explanation, despite of decades of debated studies and speculations. Population Biology is a very active field, encompassing such diverse approaches as tenacious, harsh field work to track long term demographic and genetic fluctuations, or sophisticated conversations with a computer about strange attractors possibly causing chaos in the density fluctuations."

## RESPON-S

LISTSERVER (Internet): **LISTSERV%UVMVM.BITNET@VM1.NODAK.EDU**

LISTSERVER (BITNET): **LISTSERV@UVMVM**

Moderator: Dayna Flath

Description: "Discussion of socially responsible investing by colleges and universities. Particularly suitable for those serving on committees charged with recommending or setting institutional policy on socially responsible investment votes on shareholder resolutions, divestment, community investment or other initiatives related to the university's long and short term investments. Covers internal and external politics. Current issues include South Africa, Northern Ireland, animal testing, environmental protection, corporate PAC's, equal opportunity/affirmative action, and tobacco sales."

## SAFETY

LISTSERVER (Internet): **LISTSERV%UVMVM.BITNET@VM1.NODAK.EDU**

LISTSERVER (BITNET): **LISTSERV@UVMVM**

Moderator: Dayna Flath

Description: "Mailing list for people interested in the various environmental, health and safety issues and problems on college and university campuses. These can include life safety issues (fire protection, trip and fall, general safety issues), chemical safety issues (waste disposal, laboratory safety, meeting regulations), biological hazards and radiation safety. Both users of hazardous materials and people administering campus safety programs are welcome on the list."

## SCOUTS-L

LISTSERVER (Internet): **LISTSERV%NDSUVM1.BITNET@CUNYVM.CUNY.EDU**

LISTSERVER (BITNET): **LISTSERV@NDSUVM1**

Moderator: Douglas J. Coffman

Description: "The SCOUTS-L list was formed to provide an opportunity for members of youth groups world-wide to interact, compare notes on their programs, discuss organizational problems, and communicate with members in distant units. The groups discussed may include, but will not be limited to the Boy Scouts, Girl Scouts, Boys' and Girls' Clubs, etc."

## SEAC-L

LISTSERVER (BITNET): **LISTSERV@UGA**

Moderator: Paul Jones

Description: "This list is for members of local chapters of SEAC and students interested in forming chapters of SEAC on their campuses. Topics include actions taken by local chapters, coordination of national efforts, con bulletins of scientific interest on environmental topics."

## SFER

LISTSERVER (Internet): **sfer-request@MTHVAX.CS.MIAMI.EDU (see below)**

LISTSERVER (BITNET): **SFER@UMIAMI (see below)**

Moderator: A.E. Mossberg

Description: "The South Florida Environmental Reader is primarily intended for people in South Florida to keep abreast of local environmental issues. The newsletter is published on a monthly basis, and distributed both in electronic and paper formats. To receive the electronic edition, send a message to sfer-request@MTHVAX.CS.MIAMI.EDU or to SFER@UMIAMI.BITNET."



**UIGIS-L**LISTSERVER (Internet): **LISTSERV@UBVM.CC.BUFFALO.EDU**LISTSERVER (BITNET): **LISTSERV@UBVM**

Moderator: David M. Mark

Description: "This list was formed to serve as a vehicle for discussion of topics related to the design and testing of user interfaces for Geographic Information Systems (GIS) and other geographic software. Related topics on human-computer interaction for spatial information, on spatial cognition related to GIS use, and on the use of geographic information in general, also are welcome."

**UN**LISTSERVER (Internet): **LISTSERV@IndyCMS.IUPUI.Edu**LISTSERVER (BITNET): **LISTSERV@IndyCMS**

Moderator: John B Harlan

Description: "UN (United Nations) is dedicated to discussion of the United Nations, and is open to all interested persons."

**URBAN-L**LISTSERVER (Internet): **URBAN-L%TREARN.BITNET@VM1.NODAK.EDU**LISTSERVER (BITNET): **LISTSERV@TREARN**

Description: "Mailing list for information exchange, ideas, etc. on the science of Urban Planning."

**URBANITES**LISTSERVER (Internet): **urbanites-request@psyche.mit.edu (see below)**LISTSERVER (BITNET): **LISTSERV@TREARN**

Moderator: Stephen G. Wadlow

Description: "The purpose of this mailing list is to discuss and promote self-sufficiency in everyday life in many forms. This includes but is not limited to basic needs such as food, shelter, health, and safety. A unique aspect of this list, however, unlike many others, is that we will concentrate on the city and urban/semi-urbs applications of traditional self-sufficiency technology. Thus, discussions on raising fish in a small backyard pool or in a large aquarium instead of in cage-culture rafts on a farm pond; raising veggies and some small-tree fruits in containers on the patio or under grow-lights at work (a ready source of fluorescent fixtures for most of us!) instead of in a 20 x 40 garden plot "out back". Send requests to be added directly to urbanites-request@psyche.mit.edu and include urbanites-request in your subject line."

**CARL System**URL: **telnet://database.carl.org**

The Colorado Alliance of Research Libraries is a collection of many databases. Included are library catalogs, business databases, and the below databases. CARL is available by dial-up to those without Internet connections-see Part 3.

**UnCover**

Contains records describing journals and their contents. It includes more than 14,000 titles, and more than 4 million articles. Over 750,000 articles are added annually. As of this writing there were 374 items found on the keyword biodiversity. In addition to being able to search by keyword, you can search by author and you can browse by journal title. The following are among the titles indexed:

*Acquatic Conservation*  
*Advances in Ecological Research*  
*Biodiversity and Conservation*  
*Bird Conservation International*  
*Buzzworm*  
*Chemical Week*  
*Conservationist, The*

*Green Library Journal*  
*Harvard Environmental Law Review, The*  
*International Wildlife*  
*Journal of the Air and Waste Management Association*  
*Mining Engineering*  
*National Geographic*  
*National Wildlife*

*E: The Environmental Magazine*  
*Earth Island Journal*  
*Ecology Law Quarterly*  
*Environmental Action*  
*Environmental Law*  
*Environmental Ethics*  
*Environmental History Review*  
*Forest and Conservation History*  
*Journal of Energy and Development*  
*Journal of Environmental Health*  
*Journal of Environmental Law and Litigation*  
*EPA Journal*  
*Ecologist, The*

*Naturalist, The*  
*Nature*  
*Nature Conservancy Magazine, The*  
*Our Planet*  
*Pollution Engineering*  
*Scientific American*  
*Stanford Environmental Law Journal*  
*Wilderness*  
*Wildlife Conservation*  
*World Water*  
*Wood and Wood Products*

**DEER**URL: **telnet://pac.carl.org**

The Directory of Environmental Education Resources is a joint project of the Colorado Alliance for Environmental Education and the Colorado Department of Education. Access is provided as a service of Pikes Peak Library District. DEER includes information about regional (Colorado area) agencies, organizations, businesses and individuals who offer any type of environmental education resource. Searching on the word "conservation" pulls 177 records.

**Journal Graphics**

This database includes more than 75,000 records that refer to broadcasts that appeared on CNN, ABC, CBS, PBS, and National Public Radio. Included are the story's headline, the program name, an abstract and the names of guests and the program's anchor. Subject terms are assigned to each record by Journal Graphics, Inc. Printed transcripts for any of the programs in the database may be ordered online.

Other databases are available, such as Facts on File and several from Information Access Company (Business Index and ASAP, National Newspaper Index), but they require a user account and are password protected.

**Conslink Bulletin Board on Biological Conservation**LISTSERVER (Internet): **LISTSERV@SIVM.SI.EDU**LISTSERVER (BITNET): **LISTSERV@SIVM**

CONSLINK is a service of the Conservation and Research Center of the National Zoological Park, Smithsonian Institution, and was established to improve communication between individuals and institutions around the world who are interested in biological conservation. Its files, distributed through a BITNET listserver, include lists of conferences, Non-Governmental Organizations interested in conservation, tropical field research stations, conservation training opportunities, various newsletters, and other information. Subscribers to the list (see CONSLINK in the BITNET/Internet Lists section) receive messages announcing when files have been updated or the new files themselves. An index of all files is available and is regularly updated.

You may wish to start by sending the message GET CONSLINK FILELIST to the listserver address above. Also:

GET CONSLINK INFO  
 GET CONSLINK B-C-NEWS (the Biological Conservation Newsletter, see Newsletter section below)  
 GET CONSLINK MEETINGS  
 GET CONSLINK TRAINING

**Electronic Publications**

Publications distributed electronically allow people with Internet connections to reach their peers electronically, without the traditional time lag that has always existed in the publication of printed journals. Additionally, the cost of publishing scholarly journals has doubled since 1980, making a no-cost or low-cost electronic distribution strategy an attractive option for associations and organizations.

### Biological Conservation Newsletter

LISTSERVER (Internet): [listserv@sivm.si.edu](mailto:listserv@sivm.si.edu)

B-C-News is edited and published by Jane Villa-Lobos, Department of Botany, Smithsonian Institution. It is distributed through CONSLINK (see the CONSLINK section above and CONSLINK in the BITNET/Internet Lists section). World-wide coverage of items of interest to biological conservationists, including citations to new publications and information on future meetings, new resources, and news items. Jane Villa-Lobos can be reached through [mnhb019@sivm.bitnet](mailto:mnhb019@sivm.bitnet). The current issue of B-C-News can be obtained by sending a message to the above address containing the words GET CONSLINK B-C-NEWS.

### Flora Online

URL: <ftp://huh.harvard.edu>

Also available from the dial-up BBS TAXACOM (Buffalo, NY, 716-896-7581). Richard Zander is both Sysop of TAXACOM and editor of the journal.

### South Florida Environmental Reader

LISTSERVER (Internet): [sfer-request@nthvax.cs.miami.edu](mailto:sfer-request@nthvax.cs.miami.edu)

LISTSERVER (BITNET): [LISTSERV@UCF1VM](mailto:LISTSERV@UCF1VM)

A primarily-regional publication, though people outside Florida may find it interesting. Subscriptions are handled automatically by the above BITNET address, or manually by the above Internet address. The editor is Andrew Mossberg; Internet: [aem@nthvax.cs.miami.edu](mailto:aem@nthvax.cs.miami.edu); or BITNET: [AEM@UMIAM1](mailto:AEM@UMIAM1)

### Newsletters available from EcoNet

URL: <ftp://igc.apc.org>

EcoNet is described in detail in Part 3; their anonymous ftp site stores the following: ECIX and ECIX Climate Digest, Tiempo, Hot News, DELTA, Climate Adaptation News, Change and Eco.

### ECIX and ECIX Climate Digest

The Energy and Climate Information Exchange (ECIX), a project of EcoNet, is aimed at educating environmental groups and the general public on the potential of energy efficiency and renewable energy to reduce the use of fossil fuels and their contribution to climate change. For information send E-mail to [ecixfiles@igc.apc.org](mailto:ecixfiles@igc.apc.org), or [larris@igc.apc.org](mailto:larris@igc.apc.org).

### Tiempo

A bulletin on global warming and the third world published by the University of East Anglia (Norwich, UK) and the International Institute for Environment and Development (London, UK) with support from the Swedish International Development Authority.

### Hot News

A quarterly newsletter of the Climate Action Network, United Kingdom.

### DELTA

The quarterly newsletter of the Canadian Global Change Program, Royal Society of Canada.

### Climate Adaptation News

The quarterly newsletter of the Climate Adaptation Branch of the Atmospheric Environment Service, Environment Canada.

### Change

A publication on scientific research and policy making in the Netherlands concerning global change, published by the Netherlands' National Research Programme on Global Air Pollution and Climate Change.

### ECO

The site's pub/ECO subdirectory contains issues of the ECO newsletter, written by non-government organizations at meetings of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change. The group meets every three-six months.

### Greendisk Paperless Environmental Journal

URL: <ftp://csus.edu/pub/greendisk>

The Greendisk Paperless Environmental Journal is a forum for the publication of research reports, press releases, action alerts, and news summaries from the world's environmental groups and government agencies. Samples are available through EnviroLink Gopher discussed above, and from the ftp site. Subscriptions to \_The GreenDisk\_ are provided via the anonymous FTP site at IGC, and through delivery straight to people's mailboxes on EcoNet and America Online. P.O. Box 32224, Washington, DC 20007, 800/484-7616-DISK (Code#3475); D-I-S-K must be entered to access the phone number. E-mail: [EcoNet:greendisk](mailto:EcoNet:greendisk); Internet: [greendisk@igc.apc.org](mailto:greendisk@igc.apc.org); CompuServe: 70760,2721.

### Sense of Place

Sense of Place is a student-produced environmental journal, published nine times a year, as a (Macintosh) Hypercard stack. Questions and comments, as well as requests for issues, should be sent to [sop@dartmouth.edu](mailto:sop@dartmouth.edu).

### The Scientist

URL: <ftp://ds.internic.net/pub/the-scientist>

[gopher://iinternic.net/70/InternIC\\_Directory\\_and\\_Database\\_Services](gopher://iinternic.net/70/InternIC_Directory_and_Database_Services)

A biweekly newspaper for scientists and other researchers; includes information that covers current events and issues concerning professional research, including funding legislation, new grants, employment and salary trends, career advancement opportunities, ethics and conflicts of interest, representation of women and minorities in science, and the interplay of industrial, academic, and governmental research.

### The EnviroLink Network and EnviroGopher

URL: <telnet://envirolink.org> login: [gopher](gopher://envirolink.org)

<ftp://envirolink.org>

<gopher://envirolink.org>

Creators of the EnviroLink Network run the EnviroLink and GreenOrg mailing lists, EnviroGopher (see "Gopher Information Servers," below), the anonymous ftp site and gopher.

As Gophers do, this one points to other Internet resources, including the telnet site of the EPA National Online Library System, information on several BITNET mailing lists, USENET news groups, Greenpeace On-Line, and it has a sample issue of the Greendisk Paperless Environmental Journal (normally distributed on floppy disk).

The Envirolink Network plans to expand their resources to include dial-up connections. Their street address: 4551 Forbes Avenue, 3rd Floor, Pittsburgh, PA, 15213. Voice: 412/681-8300; Internet mail: [admin@envirolink.hss.cmu.edu](mailto:admin@envirolink.hss.cmu.edu)

### EPA's OAQPS TTN System

URL: <telnet://ttnbbs.rtpnc.epa.gov> login: [press <enter>](telnet://ttnbbs.rtpnc.epa.gov)

The EPA's Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) is a network of independent BBSs that provide technical information, documents, files and messages related to the control of air pollution. To reach the TTN gateway, telnet to the above site, or their dial-up number is 919/541-5742. The BBSs available include:

#### AIRS Aerometric Information Retrieval System

The focus of the AIRS BBS is to encourage the exchange of information among state and local agencies that utilize AIRS documents and information. AIRS BBS is operated by the National Air Data Branch (NADB) of the Office of Air Quality Planning and Standards.



**AMTIC Ambient Monitoring Technology Information Center**

The AMTIC BBS is centered around the exchange of ambient monitoring related information. At the present time the AMTIC electronic bulletin board system contains information on all the Reference and Equivalent methods for the criteria pollutants. As the system evolves it will also contain all the TO Methods and other noncriteria pollutant methodologies. The AMTIC BBS already contains all Federal Regulations pertaining to ambient monitoring. It also contains ambient monitoring QA/QC related information and some information on ambient monitoring related publications. There is also available information on ambient monitoring news, field and laboratory studies of interest and available related training.

**APTI The Air Pollution Training Institute**

APTI offers technical assistance and training in support of the nation's regulatory programs of air pollution abatement.

**BLIS**

The BLIS BBS contains information from the Reasonably Available Control Technology (RACT) / Best Available Control Technology (BACT) / Lowest Achievable Emission Rate (LAER) Clearinghouse. This information is distilled from air permits submitted by most of the State and local air pollution control programs in the United States. The data is meant to assist State/local agency personnel and private companies in determining what types of controls other air pollution agencies have applied to various sources. The BLIS database option allows the user to do interactive searches of the database.

**CAAA Clean Air Act Amendments BBS**

CAAA is designed to provide access to information on the Clean Air Act amendments of 1990. Through this electronic information dissemination vehicle, the CAAA BBS allows regulators, the regulated community and members of the general public to easily obtain access to that information that is relevant to the Clean Air Act (CAA) amendments of 1990. In this manner, the task of understanding, implementing and complying with the requirements of the law will be made easier.

**CHIEF Clearinghouse for Inventories and Emission Factors**

The CHIEF BBS provides access to tools for estimating emissions of air pollutants and performing air emission inventories. CHIEF will serve as EPA's central clearinghouse for the latest information on air emission inventories and emission factors. Emission estimation data bases, newsletters, announcements and guidance on performing inventories will be included in CHIEF.

**COMPLI COMPLIance Information**

The COMPLI BBS contains three databases. They are:

1. The National Asbestos Registry System (NARS), a listing of all asbestos contractors, their inspections and the results of them. This database is used to target contractors for inspection.
2. Determinations Index, a compilation of clarifications and determinations issued by EPA concerning selected subparts of the Federal Register. It consists of two major parts: NSPS determinations and NESHAP determinations.
3. Woodstoves, a database of EPA Certified Woodstoves and Woodstove manufacturers. COMPLI BBS is maintained by EPA's Stationary Source Compliance Division (SSCD).

**CTC Control Technology Center**

The CTC is a cooperative effort for engineering assistance to State and local air pollution control agencies (and private companies to an extent) by the Air and Engineering Research Laboratory and the Office of Air Quality Planning and Standards. It is a cooperative effort with the State and Territorial Air Pollution Program Administration (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO).

**EMTIC Emission Measurement Technical Information Center**

The EMTIC BBS provides technical guidance on stationary source emission testing issues, particularly to people who conduct and/or oversee emissions tests in support of the development and implementation of emission standards, emission factors, and State implementation plans.

**NSR New Source Review**

The NSR BBS provides material and information pertaining to New Source Review permitting. The user can search the abstracted index of the "New Source Review Prevention of Significant Deterioration and Nonattainment Area Guidance Notebook" by selected key words or a customized text word or text string.

**NATICH BBS**

NATICH is an information service cooperatively provided by EPA, the State and Territorial Air Pollution Program Administrators (STAPPA), and the Association of Local Air Pollution Control Officials (ALAPCO) to support their efforts at controlling toxic (non-criteria) air pollutants. Thus, the Clearinghouse is designed to facilitate the exchange of information among federal, state, and local agencies concerned with control of toxic air pollutants. The Clearinghouse annually collects, classifies, and disseminates information submitted by State and Local (S/L) agencies regarding their air toxics programs. In addition, NATICH also provides information on current federal activities in controlling air toxics.

**OMS Office of Mobile Sources**

Provides information pertaining to mobile source emissions, including regulations, test results, models, guidance, etc., including: the Office of Mobile Sources contact list, the OMS Rulemaking Packages and reports regarding the Clean Air Act, vehicle and engine certification guidance, fuel economy information, vehicle emissions models, and public awareness information.

**SCRAM Support Center for Regulatory Air Models**

The SCRAM BBS is EPA's primary source for the acquisition of the computer code for the regulatory air models. Changes to the models, including updates, corrections, and new regulatory codes are primary features.

**The FedWorld Gateway System**

URL: <telnet://fedworld.gov>

FedWorld is a computer bulletin board run by the National Technical Information Service in Springfield, Virginia. It is available from the Internet, through the telnet address, and through a regular modem dial-up, at 703/321-8020. Following a "Government Information Locator System" model, FedWorld provides a gateway to around 120 BBSs run by or for Federal agencies. Of interest here are 24 BBSs, most of which have been described in detail by Judy Trimarchi in her document, "Environmental and Related BBS List."

From the Top Menu of Fedworld, you can reach the BBS of your choice by typing a series of "stacked" commands. To reach ALF, for example, you could type d32 and press ENTER. This tells the software to go to the Gateway menu (option d on the first menu), dial-out to a BBS, (option d on the second menu), and that you want #2, ALF BBS. As BBSs are useful for transferring private E-mail and files, you'll find that there are areas you won't be allowed to use.

2. ALF, National Agricultural Library BBS (Dept. of Agriculture).
4. BOM-BBN, Bureau of Mines-Bulletin Board Network (Dept. of Interior).
7. CLU-IN, Superfund Data and Information (Environmental Protection Agency).
16. EPUB, Energy Information and Data (Dept. of Energy).
19. FERC-CIPS, Federal Energy Regulatory Commission, Commission Issuance Posting System (Dept. of Energy).
27. Megawatt 1, Information on Energy and DoE (Dept. of Energy).
37. WTIE-BBS, Wastewater Treatment Information Exchange (EPA).
38. QED-BBS, Quick Epicenter Determination and Earthquake Data. U.S. Geological Survey, National Earthquake Information Center, Golden, CO (USGS).
45. TELENEWS, Data and Information on Fossil Fuels (Dept. of Energy).
48. USGS-BBS, BBS/CD-ROM Information (USGS).
56. PPIC-BBS, Pollution Prevention Clearinghouse and Pollution Prevention Information Exchange System (EPA).
61. STIS, Science & Technology Information System (National Science Foundation).
66. NOAA-ESDD, Earth System Data Directory (National Oceanic and Atmospheric Administration).
67. Offshore-BBS, Off-Shore Oil & Gas Data (Dept. of Interior).
74. ATTIC, Alternative Treatment Technical Information Center (EPA).
76. DRIPSS, Drinking Water Information Processing Support (EPA). Use requires registration with SysOp Barry Gates, 703/339-0420.
77. PIM BBS, Pesticide Information Network (EPA).
79. NPS-BBS, Nonpoint Source Program BBS (EPA).

- 80. OEA BBS, Office of Environmental Affairs (Dept. of Interior).
- 94. ORDBBS, Office of Research & Development BBS (EPA).
- 98. AEE BBS, Office of Environment & Energy (Federal Aviation Administration).
- 110. OMET-BBS, Minority Energy Information Clearinghouse, Information on minority business in the energy fields (Dept. of Energy).
- 113. Marine Data BBS, Marine Databases & Files (U.S. Coast & Geodetic Survey, National Ocean Service, NOAA).
- 114. Call-ERS BBS, Agriculture Economic Research Service BBS (USDA).
- 118. PerManNet, the Clearinghouse on Development Communication (U.S. Agency for International Development, Dept. of State).

For more information about the mission of FedWorld, see the References for "FEDLINE: A Feasibility Study of the Establishment and Operation of FedWorld, A Government-Wide Information Locator System at NTIS," by the National Technical Information Service.

## Gopher Information Servers

### ENVIROGOPHER

URL: <gopher://envirolink.org>

One section (URL: <gopher://envirolink.org/11/.EnviroNetworks/Other%20Environmental%20Gophers>) of this Gopher points to the following other Gophers:

- Australian National Parks & Wildlife Service Biodiversity Gopher  
URL: <gopher://osprey.erin.gov.au/1>
- Australian National University Biodiversity Gopher  
URL: <gopher://life.anu.edu.au/1>
- Base de Dados Tropical (BDT) Biodiversity Gopher (Brazil)  
URL: <gopher://bdt.ftpt.br/1>
- Center for Analysis of Environmental Change  
URL: <gopher://gaia.ucs.orst.edu/11/osu-i%2bs/osu-d%2bo/caec>
- Centre for Environmental Research  
URL: <gopher://delphi.dur.ac.uk/11/Green/Research>
- Consortium for International Earth Science Information Network (CIESIN)  
URL: <gopher://gopher.ciesin.org/1>
- Cornell University Office of Environmental Health  
URL: <gopher://gizmo.oeh.cornell.edu/1>
- ENN: Environmental News Network Publications  
URL: <gopher://gopher.uidaho.edu/11s/e-pubs/enn>
- Ecogopher at University of Virginia  
URL: <gopher://ecosys.drdr.virginia.edu/11/>
- Environmental Resources Information Network (ERIN)  
URL: <gopher://kaos.erin.gov.au/1>
- Gardens and Horticultural Information (Australian National Botanic Gardens)  
URL: <gopher://155.187.10.12/11/othergophers/gardens>
- Harvard University Biodiversity and Biological Collections  
URL: <gopher://muse.bio.cornell.edu>
- Horticultural Information (Univ. of Saskatchewan)  
URL: <gopher://access.usask.ca/77/.index/hortinfo>
- or  
URL: <gopher://gopher.usask.ca/11/Other%20%28Weather%2c%20HortInfo...%29/Horticulture%20Information>
- Horticulture Guides (Univ. of Missouri)  
URL: <gopher://bigcat.missouri.edu/11/reference/guides-h>

- Master Gardener Information (Texas Agricultural Extension)  
URL: <gopher://leviathan.tamu.edu/11s/mg>
- National Oceanic and Atmospheric Administration (NOAA) National Environmental Referral Service:  
URL: <gopher://esdim1.nodc.noaa.gov/1>
- National University of Singapore Biocomputing Gopher  
URL: <gopher://gopher.technet.sg:2100/11/Singapore/BioComputing>
- Ornamental Horticulture (Univ. of Delaware, Coll. Agric. Sci.)  
URL: <gopher://bluehen.ags.udel.edu/11/.facts/.ornhort>
- Sense of Place (Environmental Journal)  
URL: <gopher://dartmouth.edu/11/AnonFTP/pub/SOP>
- U.S. National Science Foundation (NSF)  
URL: <gopher://stis.nsf.gov/1>
- Univ. Lund Electronic Library, Sweden: UB2  
URL: <gopher://munin.ub2.lu.se/11/>
- USENET News 'rec.gardens' (ex Univ. of Canberra)  
URL: <gopher://services.canberra.edu.au:4320/1nntp%201s%20rec.gardens>

### CIESIN

The CIESIN (pronounced "season"—#6 above)—Consortium for International Earth Science Information Network—Gopher was created to address environmental data management issues raised by the U.S. Congress, the Administration and the advisory arms of the federal policy community. CIESIN's mission is to facilitate access to, use, and understanding of global change information world wide.

### Electronic Journals at CICNet

URL: <gopher://gopher.cic.net/11/e-serials>

The CICNet Electronic Journal Project is an attempt by the Committee on Institutional Cooperation to put in one place all the public domain electronic journals currently available on the Internet. For 15 publications concerning the environment, use the path: General Subject Headings/science/environment.

### EPA

URL: <gopher://thor.ece.uc.edu:4323/1g2go4%20gopher.epa.gov%2070%201%20>

The EPA has a Gopher server that concentrates on population, critical technologies, energy, agriculture, industry/commerce, environmental justice, environmental security, and ecology/habitat issues. In addition, EPA's Chemical Substance Fact Sheets series is on the Ecogopher (#9 above).

### Federal Register Excerpts

URL: <gopher://gopher.musc.edu/11/library/journals/federal>

The Federal Register is a publication used by the government to announce funding for new programs, the re-funding of existing programs and general official announcements. Parts of the FR are now available through this gopher server in the Counterpoint Publishing directory; there are over 1,000 references EPA articles indexed.

### Forestry Gophers

URL: <gopher://minerva.forestry.umn.edu>  
<gopher://mercury.forestry.umn.edu>

The University of Minnesota has a Forestry Library Gopher at <minerva.forestry.umn.edu>. The College of Natural Resources at the University of Minnesota is running a Gopher for their students, faculty and staff, at <mercury.forestry.umn.edu>.

### Great Lakes Information Network

URL: <gopher://gopher.great-lakes.net:2200/11/>



Information about the environment, habitats and ecosystems of the Great Lakes Region of the United States is available from the Gopher at [gopher.cic.net](mailto:gopher.cic.net).

### TogetherNet

URL: [gopher://gopher.together.uvm.edu](mailto:gopher://gopher.together.uvm.edu)

Information about the TogetherNet service is available at this site. The Together Foundation for Global Unity is an international non-governmental organization (NGO—recognized by the United Nations) with electronic mail gateways to other online systems, current events areas, databases of grant information in the areas of environment, development and human rights, an online document library and an events calendar. The service is available for organizational use for a fee, and has non-Gopher offerings available for people not on the Internet. Full access costs \$10 per month with a \$15 start-up fee.

### United Nations Information

URL: [gopher://nywork1.undp.org](mailto:gopher://nywork1.undp.org)

United Nations papers, press releases, and other documents are available from the U.N. Gopher.

### USENET News Groups

[alt.activism](#)  
[alt.activism.d](#)  
[alt.fishing](#)  
[alt.save.the.earth](#)  
[alt.sustainable.agriculture](#)  
[bionet.announce](#)  
[bionet.general](#)  
[bionet.agroforestry](#)  
[bionet.biology.tropical](#)  
[misc.activism.progressive](#)

[rec.backcountry](#)  
[rec.gardens](#)  
[rec.hunting](#)  
[sci.bio](#)  
[sci.bio.technology](#)  
[sci.energy](#)  
[sci.environment](#)  
[sci.geo.geology](#)  
[talk.environment](#)  
[talk.politics.animals](#)

### Miscellaneous Internet Resources

Below are additional resources you may find useful.

#### Archie, WAIS, World Wide Web

These information-locating tools are extremely powerful, but are out of the scope of this document. A "generic" World Wide Web display can be accessed by telnetting to [info.cern.ch](mailto:info.cern.ch); USGS has some interesting information under [subject/earth science](#)).

#### Community Computer Networks

These systems are designed to encourage people to become more involved in their local (geographic) community and to make the institutions and government agencies that serve them more visible and accessible. Tom Grunder's August 1993 listing "NPTN (National Public Telecomputing Network) Affiliates" includes information about the following systems. Not all have information for conservationists, but they carry what their users wish them to carry, and if one of these is in your area, you may wish to participate.

Again, the primary uses of these systems are for local information and action; as dial-up connections (inbound modem ports) are often limited in number, inbound access by people not in the community is sometimes a touchy issue, and is discouraged in most cases. Therefore we have omitted the dial-up phone numbers.

■ BUFFALO FREE-NET, Buffalo, NY (Demo System)

URL: [telnet://freenet.buffalo.edu](mailto:telnet://freenet.buffalo.edu)

■ CLEVELAND FREE-NET, Cleveland, OH

URL: [telnet://freenet-in-a.cwru.edu](mailto:telnet://freenet-in-a.cwru.edu) (go epa)

■ COLUMBIA ONLINE INFORMATION NETWORK (COIN), Columbia, MO

URL: [telnet://bigcat.missouri.edu](mailto:telnet://bigcat.missouri.edu) (login as guest)

■ DENVER FREE-NET, Denver, CO:

URL: [telnet://freenet.hsc.colorado.edu](mailto:telnet://freenet.hsc.colorado.edu)

Health Building lists the bionet news groups. Also: go recycle, go noaa (career opportunities)

■ HEARTLAND FREE-NET, Peoria, IL

URL: [telnet://heartland.bradley.edu](mailto:telnet://heartland.bradley.edu) Environmental Information Center under Special Interest Groups

■ LORAIN COUNTY FREE-NET, Elyria, OH

URL: [telnet://freenet.lorain.oberlin.edu](mailto:telnet://freenet.lorain.oberlin.edu) (login as guest, go natural and go nature)

■ NATIONAL CAPITAL FREE-NET, Ottawa, Canada

URL: [telnet://freenet.carleton.ca](mailto:telnet://freenet.carleton.ca) (go envir, has several interesting sub-areas)

■ TALLAHASSEE FREE-NET, Tallahassee, FL

URL: [telnet://freenet.fsu.edu](mailto:telnet://freenet.fsu.edu) (go environ and go science)

■ TRISTATE ONLINE, Cincinnati, OH

URL: [telnet://cbos.uc.edu](mailto:telnet://cbos.uc.edu)

■ VICTORIA FREE-NET, Victoria, BC, Canada

URL: [telnet://freenet.victoria.bc.ca](mailto:telnet://freenet.victoria.bc.ca) (go science, go environment; information on ozone, biodiversity, environmental education, local organizations)

■ WELLINGTON CITYNET, Wellington, New Zealand (apparently a closed system)

■ YOUNGSTOWN FREE-NET, Youngstown, OH

URL: [telnet://yfn.ysu.edu](mailto:telnet://yfn.ysu.edu) (Has forest info, including speeches by Clinton. Login as visitor)

■ BIG SKY TELEGRAPH, Dillon, MT

URL: [telnet://bigsky.bigsky.dillon.mt](mailto:telnet://bigsky.bigsky.dillon.mt) (no known guest account available)

CapAccess, a new system for the Washington, DC, area (URL: [telnet://cap.gwu.edu](mailto:telnet://cap.gwu.edu)), does not appear in the NPTN list but has a Nature Center (go nature). Additional information is available for anonymous FTP from [nptn.org](http://nptn.org) in the [pub/info.nptn](#) subdirectory and Coin of the Realm (NPTN.ZIP).

### Cornell Extension Network (CENET)

URL: [telnet://empire.cce.cornell.edu](mailto:telnet://empire.cce.cornell.edu) login: guest

Guest accounts are allowed on the cooperative extension system of Cornell's Extension Electronic Technology Group. No password is required for access. Questions about the service should send mail to [eetg@cce.cornell.edu](mailto:eetg@cce.cornell.edu) or by calling the voice number 607/225-8127 (Henry DeVries).

### EcoNet Anonymous FTP Site

URL: <ftp://igc.apc.org>

See the /pub directory for a wide variety of information.

### Energy Ideas Clearinghouse BBS

URL: [telnet://eicbbs.wseo.wa.gov](mailto:telnet://eicbbs.wseo.wa.gov)

Managed by the Washington State Energy Office with funding from the Bonneville Power Administration, the Western Area Power Administration, and the U.S. Department of Energy. Created to provide information services to utility representatives and energy professionals in the commercial and industrial sectors in the Pacific Northwest. The EICBBS provides a mechanism for fast and easy information transfer and serves as a central repository of information on all types of energy efficiency in the commercial and industrial sectors. The dial-up data number 206/956-2212 is available to non-Internet callers.

### EPA OLS

URL: [telnet://epaibm.rtpnc.epa.gov](mailto:telnet://epaibm.rtpnc.epa.gov)

The EPA's Online Library System is a computerized list of bibliographic citations compiled by the EPA library network. Each item in the database consists of bibliographic information and may be followed by one or more lines of holdings information for EPA libraries; not all EPA regional libraries have all documents, but your local librarian may be able to assist you in getting hard-to-find documents. Telnet to [epaibm.rtpnc.epa.gov](mailto:epaibm.rtpnc.epa.gov), select PUBLIC, then OLS. Databases include the National Catalog, Hazardous Waste, Clean Lakes, Access EPA, and others. Information about the system can be found in the help file (which includes telephone numbers and cities of EPA offices).

**EC'S EUROBASE SESAME**URL: <telnet://echo.lu>

The European Community's SESAME is a database containing descriptions (in English) of research and development projects in the fields of energy, raw materials, environment, biotechnology, radiation protection, industrial technology and health, undertaken with EC funding from 1975 to the present. The telnet access via the Internet is experimental. Questions may be sent to [echo.mail@eurokom.ie](mailto:echo.mail@eurokom.ie)

**FireNet**URL: [ftp://life.anu.edu.au/pub/landscape\\_ecology/firenet](ftp://life.anu.edu.au/pub/landscape_ecology/firenet)  
<gopher://life.anu.edu.au>

FireNet is an international network for rural and landscape fire information, including fire behavior, weather, prevention, mitigation and suppression, and plant and animal responses to fire and fire effects. For more information send electronic mail to [david.green@anu.edu.au](mailto:david.green@anu.edu.au)

**Global Lab**

The Global Lab is a student collaboration project, a worldwide online community of students, teachers and scientists studying their local and global environments. Students learn science through hands-on investigations of their environments and collaborate with "fellow researchers" around the world. Areas of research include ozone depletion, animal migrations, coastal and terrestrial ecology, air and water quality, or global climate change. Membership by school and a fee of \$250 per semester is required. For more information: [gl@terc.edu](mailto:gl@terc.edu)

**Global Land Information System**URL: <telnet://glis.cr.usgs.gov> login: **guest**

GLIS is a centralized, interactive source of land information for use in earth science research and global change studies, including land use maps of the United States, graphs and other data. The remote systems menu can take you to the Global Change Master Directory, the NOAA Earth System Data Directory, the Earth Observation Center-Information Center, and others.

**Internet Earth Day 1995**

The Subcommittee on Global Change Research of the FCCSET Earth and Environmental Science Committee is planning several telecommunications events in connection with Earth Day 1995. The FCCSET is the Federal Coordinating Council on Science, Engineering, and Technology, a broadly-based inter-agency coordinating body. For more information send E-mail to [zibitm@harvarda.harvard.edu](mailto:zibitm@harvarda.harvard.edu)

**LISTGopher**URL: <gopher://dewey.lib.ncsu.edu/11/library/disciplines/library/listgopher>

The purpose of LISTGopher is to help you search LISTSERV archives (see above, BITNET/Internet Lists, for information about listservers). It uses a Gopher interface, and performs LISTSERV commands "in the background," making the search easier. The results are sent to your E-mail account. Currently the system only searches library-related lists. One Gopher containing LISTGopher is at the above address.

**LOCIS**URL: <gopher://marvel.loc.gov/11/research/locis>  
<ftp://acura.gslis.utexas.edu/pub/locis.zip>

The Library of Congress Information System has several databases, including the LC Catalog of books (LOCI), and cartographic materials (LOCM) including maps, globes, relief models, and star charts cataloged by the Library since 1968. Help files are available at the ftp sites mentioned above.

**Life Science Network**

This is a pay system offering access to over 80 life science and related databases, including BIOSIS Previews, BioBusiness, MEDLINE and CA Search. For more information, [biosis@a1.relay.upenn.edu](mailto:biosis@a1.relay.upenn.edu), or call (voice) 800/523-4806 or 215/587-2016.

**Meeman Archive**URL: <telnet://hermes.merit.edu>

The Meeman Archive, a database of magazine and newspaper articles, was established by the Scripps-Howard News Service in 1982. The database contains over 1100 journal articles from 1990 to the present, all focusing on the environment in Michigan. Telnet to [hermes.merit.edu](telnet://hermes.merit.edu), the host is mirlyn and the login is meem. The command to exit the database is stop.

**NATO**

The North Atlantic Treaty Organization's document "NATO works with Cooperation Partners on Environmental Problems" is available from the anonymous ftp site [pub/history/nato/factsheet](ftp://pub/history/nato/factsheet), as factsh.2. A service from the NATO Scientific Affairs Division beginning operation September 27, 1993 is called the NATO Science Programme and the Environmental Projects of the Committee on the Challenges of Modern Society. A quarterly newsletter is planned. Interested persons should subscribe to the list NATOSCI, by sending an E-mail message to [LISTSERV@cc1.kuleuven.ac.be](mailto:LISTSERV@cc1.kuleuven.ac.be) (Internet) or [LISTSERV@BLEKUL11.BITNET](mailto:LISTSERV@BLEKUL11.BITNET) (BITNET), with the text SUBSCRIBE NATOSCI FIRSTNAME LASTNAME.

**RTK-NET**URL: <telnet://rtknet.org>

Right to Know-Net, of the Unison Institute of Washington, DC, is an electronic bulletin board with various EPA information resources, including the Toxic Release Inventory, the Emergency Spills Registry, Water Permit Database, FINDS-EPA master facility locator, and Census data.

**Sound file: "Looking for Bears" on SOUNDPRINT**

From the Internet Multicasting Service comes "Looking for Bears," a 30-minute sound file of the July 23, 1993, radio program SoundPrint, wherein "a group of conservation biologists are making an effort to find and preserve the remaining grizzly bears in the San Juan Mountains of southwestern Colorado." The 30-minute program is about 30 megabytes in size. SoundPrint is a program broadcast weekly on public radio stations (usually on the low end of the FM dial). Information on SoundPrint: [soundprt@jhuvms.hcf.jhu.edu](mailto:soundprt@jhuvms.hcf.jhu.edu); information on distribution sites: [sites@radio.com](mailto:sites@radio.com)

**Sound file: EPA's Carol Browner at the National Press Club**

From the Internet Multicasting Service comes Carl Browner's luncheon address to the National Press Club, aired on public radio June 30, 1993. In the sound file she discusses the Clinton administration's new initiatives to reduce pesticides in our food supply. The file is about 25 megabytes in size. The National Press Club is a program broadcast weekly on public radio stations. Information on Internet Talk Radio: [info@radio.com](mailto:info@radio.com); information on distribution sites: [sites@radio.com](mailto:sites@radio.com)

**STIS**URL: <telnet://stis.nsf.gov> login: **public**URL: <ftp://stis.nsf.gov>

The Science and Technology Information Center allows you to perform text searches on National Science Foundation publications. Related files are stored at the anonymous ftp site.

**Smithsonian Pictures**URL: <ftp://photo1.si.edu>

Digitized pictures are available from the Smithsonian Institution's Office of Printing and Photographic Services in Washington, DC. Science, technology, etc., images in several formats are being made available as a result of Project Chapman, a joint effort between the Smithsonian and the Apple Library of Tomorrow program. Get the file [ALOT-Chapman.txt](#) from the ftp site.



## NON-INTERNET RESOURCES

While some of the resources in this section are available through the Internet, all are available to people who do not have an Internet account. Direct-dial commercial online services and computer bulletin board systems (BBSs) are included, as well as online research systems.

### ECONET

Institute for Global Communications

18 De Boom Street

San Francisco, CA 94107

415-442-0220

Started in 1984 on four Apple computers, EcoNet now operates on a Sun SPARCstation 2 with 64 megabytes of memory and 3.5 gigabytes of hard disk storage. The surprising part about this computer service is that it is not operated for profit. EcoNet is administered by the Institute for Global Communication (IGC), which is part of the non-profit Tides Foundation. EcoNet is also part of the Association of Progressive Communications which is IGC's program to develop low-cost access to computer networking from outside the United States, especially from non-industrialized and Southern hemisphere countries.

Currently EcoNet has over 2,500 subscribers and is growing by about 170 users per month. Econet's users include several hundred organizations, many of whom use the service to coordinate intergroup activities. A recent article in World Watch magazine commented on EcoNet's size, "Given the size of the United States, this may appear to be a fairly small group, but it is one with considerable leverage. More than 60 percent of EcoNet's members are organizations or individuals representing organizations. Indeed, EcoNet's online phone directory, which gives the names and addresses of all of its users, reads like an bibliography of the American environmental movement."

A subscription to EcoNet costs \$10 per month and includes one hour of off-peak time. Access to EcoNet via SprintNet costs \$10 per hour for peak-time (7 a.m. to 6 p.m.), while off-peak time (6 p.m. to 7 a.m.) costs only \$5. EcoNet can also be accessed through the Internet (via telnet) for only \$3 an hour, off-peak or on! Also users can call EcoNet directly in Menlo Park, CA, for \$3 per hour (anytime) plus phone charges. The one-time subscription fee (\$15) includes a comprehensive manual describing EcoNet's services and how to connect. Econet is an international system and can communicate with 30 other networks (including CompuServe, the WELL, and Internet); users can exchange information with very large online community.

The EcoNet interface is very basic and offers 3 main functions: Mail, Conference and Database. All the command prompts are on a single line and you won't find any graphic menus on EcoNet. The users manual explains: "If IGC adopted a multi-line or graphic menu of commands for all users, the U.S. subscribers would only see a tiny increase in cost. For overseas users, the cost could increase enormously, since they pay according to the number of lines of text sent via a Packet Switching System." A new feature of EcoNet allows users go beyond sending E-mail and send faxes and telexes. So when an EcoNet user sees a bulletin about the newest clean water legislation they can type a letter to their representative while online and then fax it to Congress. A typed letter is in the congressman's office fifteen minutes after the constituent read the bulletin!

EcoNet's growing list number of online databases include: UN NPPA -a United Nations list of National Parks and Protected Areas, Harbinger File—a directory of citizen groups, government agencies and environmental education programs concerned with California environmental issues, and DEER—the Directory of Environmental Education Resources. All of these databases are accessible without additional charges.

EcoNet's power lies in its enormous number of conferences. Over 200 Econet conferences are available as well over 500 related conferences from other networks, including UseNet and other IGC networks (PeaceNet ConflictNet, HomeoNet and ConflictNet). The EcoNet system allows users to setup list of conferences to visit each time they logon to EcoNet.

## Open-Access Dial-Up BBSs and Online Services

Most of the below BBSs and online services have no access charges.

### ALF—National Agricultural Library

Data Number: 301-504-6510

Description: A BBS of one of the "Big Three" national libraries (the other two are the Library of Congress, listed in Part 2, LOCIS, in Misc. Resources, and the National Library of Medicine). This BBS carries conferences for Alternative Farming Systems and the Agriculture Information Network, has information about the Library, about agriculture resources on the Internet and about the database AGRICOLA. It is available through the Internet as well, through the FedWorld connection discussed in Part 2.

### BioTron: The Biologist's electronic network

Data Number: 202-628-2427

Description: Sponsored by the American Foundation for Biological Sciences, 730 11th Street, NW, Washington, DC 20001-4521. Voice: 202-628-1500. E-mail, job listings, organization news—electronic version of the AIBS Forum.

### CARL (The Colorado Alliance of Research Libraries)

Data Number: 303/758-1551

Description: See Part 2 for more information. This is a general service which includes conservation-related resources.

### COGSNet—Computer Oriented Geological Society Network

Data Number: 303-740-9493

Description: Sponsored by the Computer Oriented Geological Society, P.O. Box 1317, Denver, CO 80201-1317. Voice: 303-751-8553. COGS is a professional organization which actively encourages the application of computers in the field of geology, including hydrology, mapping, mining and mineralogy, paleontology, landsat imaging, geophysics, etc. The BBS features organization news, E-mail, shareware/text files, job listings, information for programmers.

### Earth Art BBS

Data Number: 803-552-4389

Run by Bob Chapman, who is also host of the GREAT OUTDOORS Conference on the RIME (RelayNet International Mail Exchange). Access is also provided to the GreenNet (tm) International Environmental BBS Network, is the South Carolina hub for the Sierra Club Network, an is operated as an adjunct to the Ambassador Graphics and Wildlife Gallery. For many readers this BBS may be worth the long distance telephone call to North Charleston, South Carolina. The RIME ID for the BBS is EARTHART #1646, and its FidoNet address is 1:372/50.

### Electric Ideas Clearinghouse BBS

Data Number: 206/956-2212

URL: <telnet://eicbbs.wseo.wa.gov>

Description: Managed by the Washington State Energy Office with funding from the Bonville Power Administration, the Western Area Power Administration, and the U.S. Department of Energy. Created to provide information services to utility representatives and energy professionals in the commercial and industrial sectors in the Pacific Northwest. The EICBBS provides a mechanism for fast and easy information transfer and serves as a central repository of information on all types of energy efficiency in the commercial and industrial sectors.

### ENVIRO BBS

Data Number: 703/524-1837

Description: Enviro is a medium for the "exchange of information on environmental protection, ecology, wildlife, endangered species, natural resources and other topics generally related thereto." The BBS has file areas in categories such as environment, geography, astronomy catalogs and data, and nature. The bulletin section includes "Earth Tips" on topics such as transportation, solid waste/recycling, lighting, water heating, etc.

**EPA's OAQPS TTN System**

Data Number: 919/541-5742.

Description: The EPA's Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) is a network of independent BBSs that provide technical information, documents, files and messages related to the control of air pollution. There is a full description in Part 2.

**The Federal Bulletin Board (GPO)**

Data Number: 202/512-1387

Description: A BBS run by the U.S. Government Printing Office to allow the public immediate, self-service access to Federal information in electronic form. (see also FedWorld, listed below.) This BBS is the result of Public Law 103-40, "The GPO Electronic Information Access Enhancement Act of 1993." As of this writing the file areas include over 200 files from the Department of Energy (including the annual energy review that shows U.S. production, consumption and price data for energy sources) and 350 from EPA; the EPA files are in these categories: Access EPA—Information Resources, EPA Federal Register, EPA Federal Register Cited Material, EPA Lead Documents and Regulations, and EPA Toxic Release Inventory/1990. Among the conferences available are four concerning the Dept. of Energy and five concerning EPA. Some fees apply; access is free, but some files are not—most are priced under \$10. An Internet connection is planned.

**FedWorld**

Data Number: 703/321-8020

Description: A gateway to over 120 BBSs run by or for government agencies. See Part 2 for a full description.

**Florida Fishline**

Data Number: 904/488-3773

Description: "This board is for anyone interested in fishing or in the fresh water fish of Florida. It contains general and scientific message areas, GFC (Game and Fish Commission) literature, news releases, abstracts and more."

**Garden Pond**

Data Number: 503/735-3074

Description: The Garden Pond BBS focuses on aquatic plants, Koi, gardening and garden ponds, and carries FidoNet and USENET conferences. Also, SysOp Jack Honeycutt is a member of the International Water Lily Society.

**GreenPeace Environet**

Data Number: 415/512-9108

Description: Sponsored by Greenpeace, includes their press releases and position papers, Rachel's Hazardous Waste News, and several conferences.

**HerpNet—The Herpetological Online Network (SATRONICS BBS)**

Data Number: 215/464-3562

Description: HerpNet is a menu option on the SATRONICS BBS. HerpNet is a national forum for the exchange of information and ideas relating to all aspects of herpetology. Anyone with an interest in the study or conservation of reptiles or amphibians is welcome to participate. The BBS includes message and file areas, as well as the Herp Society Database, and a calendar of conferences, meetings and events.

**Home Power Renewable Energy BBS**

Data Number: 707/822-8640

Description: A project of Redwood Alliance and Redwood Environmental Education Institute. Provides access message conference/file area combinations for the areas photovoltaic, micro-hydro, wind power, hydrogen energy, battery storage, electric/solar/hybrid

vehicles and education. Also provides access to the electronic versions of articles from Home Power magazine.

**HortLine**

Data Number: 703/836-2418

Description: Sponsored by the American Society for Horticultural Science, this BBS carries conferences, files, job listings and calendar listings pertaining to horticulture.

**One World**

Data Number: 310/372-0987

Description: One World carries most known environment-related conferences on FidoNet and USENET, including Enviro, Environ, Econet, Ecology, Sustainable Agriculture, Home Power, sci.environment, sci.energy, talk.environment, alt.save.the.earth, and others, as well as files and programs of interest. For many readers this BBS will be worth a long distance telephone call to Los Angeles. The FidoNet address for One World is 1:102/129; its SysOp is Larry Fletcher.

**Osprey's Nest, The (TON)**

Data Number: 301/989-9036

Description: "A Bulletin Board for Birders, Naturalists, and Conservationists." Message areas concerning birding and mineralogy; files that cover such topics as Information For Amateur Botanists, Attracting Wildlife to Your Yard, Chesapeake Bay Research Info From the University of Maryland, Pictures of Avian and Other Nature Subjects, Local and National Birding Organizations, and Hot Local Birding Locations. See also the description of the BitNet lists BIRDEAST, BIRDWEST, BIRDCNTR.

**Shore, The**

Data Number: 301/476-5098

Description: Jo Campbell is Sysop of the EcoTopics International News Service, which is open to discussions on matters such as pollution, tidal wetlands, and non-tidal wetlands. File areas include a list of environmental & ecology magazines and organizations, EcoNews OnLine Ecology NewsLetter, and Earth-Watch Magazine.

**Sonoma Online**

Data Number: 707/545-0746

Description: Has several conferences from the FidoNet network, including Home power, sustainable agriculture, and science. File area 17 includes files from Home Power magazine.

**TAXACOM**

Data Number: 716/896-7581

Description: "TAXACOM is an electronic journal, data bank and symposium for collections-oriented biosystematists and biogeographers. Unique features are the electronic journal Flora Online and the Latin Translation Service. We have recently inaugurated a pilot online herbarium database facility."

**Taxonomic Reference File (BIOSIS)**

Data Number: 215/972-6759

Description: "Online Bacterial Taxonomic Databases, Conferences on Biology/ Life Sciences Topics, Sponsored by BIOSIS-producers of Biological Abstracts."

**FidoNet and RIMEnet Networked BBSs**

The BBSs listed below have allied themselves with other BBSs to create computer conferencing networks, by running software that allows them to automatically exchange electronic mail. They carry one or more of the following international FidoNet conferences:



<b>Ecology</b>	Ecology, problems and potential solutions
<b>Enviro</b>	Environmental issues
<b>Environ</b>	Environmental issues
<b>Homepowr</b>	Alternative energy systems and homemade power
<b>Science</b>	National science echo
<b>Sust_ag</b>	Sustainable Agriculture

Or one or more of the following RIME (RelayNet International Mail Exchange) conferences:

**Great Outdoors**  
**Environmental Issues**

You may wish to make your first calls to One World BBS and Earth Art BBS (listed above), as they have many networked conferences of interest. Many of the BBSs listed below do not focus on conservation or the environment, rather they carry environment-related conferences to broaden the appeal of their BBSs. Some charge for access—shop around! Also, BBSs come and go frequently; these numbers are current as of October 1993.

If you have to make a long distance call to reach a favorite BBS, check the BBS's file areas for offline mail reading programs—they'll save you a lot of money on your long distance bills. Several QWK-compatible readers are available from Coin of the Realm, including the OLX Test Drive for DOS, WinQWK for Windows, and Freddie for the Macintosh. The following are arranged by telephone area code.

202/371-9053	AIM Net—Political & Media Issues
206/378-6028	Rock Island Communications, Friday Harbor, WA
206/488-0180	Washington Community InfoSource, Seattle, WA
206/756-9689	No.EndSkyscraper, Tacoma, WA
206/783-6368	The Helix—Intentional Future, Seattle, WA
206/786-9629	The Quarto Mundista BBS, Olympia, WA
208/375-2049	Horizon BBS II, Boise, ID
209/434-4215	Stingray!, Fresno, CA
216/562-1110	West Branch Connection, Aurora, OH
219/848-7200	The Dock BBS, Bristol, IN
301/657-8313	WorldComm, Chevy Chase, MD
301/738-0000	Network East, Rockville, MD
301/779-5946	The Jellicle Cat BBS, Riverdale, MD
303/337-0219	The Right Angle BBS, Aurora, CO
303/759-5908	The Magick Lantern, Denver, CO
304/592-3390	The Cat Eye BBS, Shinnston, WV
310/372-0987	One World, Los Angeles, CA
317/448-2842	Graffiti on the BBS Wall, Lafayette, IN
404/476-2607	The Right Place, Atlanta, GA
410/276-0658	The Keeping Room, Baltimore, MD
410/381-9617	MetroNet, Columbia, MD
413/545-4453	SpaceMet/Physics Forum, UMass/Amherst
414/458-0767	The Gold Mine Sheboygan, WI
416/213-6002	CRS Online, Toronto, Ontario
416/480-0147	One Less Car, Toronto, Ontario
416/658-9000	Silver & Gold BBS, Toronto
416/666-4896	Durham Board BBS, Whitby, Ontario
417/889-8743	TriStar Information System, Springfield, MO
501/570-2868	Environment Arkansas! Little Rock, AR
503/297-9043	Bink of an Aye, Portland, OR
503/370-9777	Capricorn Rising, Salem, OR
503/475-3056	Oregon Desert, Madras, OR
504/356-0790	Southern On-line Services, Inc.
505/662-0659	Construction Net #6, Los Alamos NM
510/530-3499	L & B Sharing BBS, Oakland, CA
510/836-4717	Body Dharma, Berkeley, CA
510/838-8338	Diablo BBS, Danville, CA

519/692-5855	B Cubed Genealogy BBS, Thamesville, Ontario
519/758-1173	Excalibar BBS, Brantford, Ontario
601/372-6998	Electronic Dreams, Jackson, MS
602/277-1334	ORAC/2—Phoenix, AZ
604/442-0252	Kettle Valley Forum, Grand Forks, British Columbia
604/545-8068	The Herb Patch, Vernon, British Columbia
608/277-9955	The Sacred Scribe, Madison, WI
613/284-0254	Lester's Hideaway, Smiths Falls, ON
613/446-6234	BitByters BBS, Rockland, Ontario
613/736-8658	Smokey's Playground
614/885-9829	Colossus, Worthington, OH
617/354-7077	Channel 1(R), Cambridge, MA
619/277-4140	Alien Biker Kat BBS
703/256-8149	Cosmic Wanderings, Annandale, VA
703/323-6719	The Beltway Bandit's BBS, Fairfax, VA
703/478-9380	Struppi's BBS, Fairfax, VA
703/538-4634	NO-Frills BBS, Falls Church, VA
703/644-6730	Pen and Brush, Springfield, VA
703/685-0019	The Hub BBS, Arlington, VA
704/541-1180	ComStar Telecommunications, Charlotte, NC
705/497-3057	Fat Agnus, North Bay, Ontario
705/721-9508	BCS Small Businesses for The Environment
706/769-0318	Route 66 BBS, Watkinsville, GA
707/441-4927	Larry's World Eureka, CA
707/545-0746	Sonoma Online, Santa Rosa, CA
707/571-7561	The BBS Express, Santa Rosa, CA
707/961-0735	Electric Magazine, Mendocino, CA
713/795-5251	The Dark Horse BBS, Houston, TX
714/522-3980	The Punkin Duster BBS, Buena Park, CA
714/879-4052	N.S.T.T.Z., Fullerton, CA
716/646-5438	The Moose BBS, North Boston, NY
716/668-6596	The Dark Star, NY
716/837-2901	Knights of Discovery, Amherst, NY
718/596-5938	DragonsLair BBS
718/519-1791	The New York Running Board
801/269-9575	The Score Board
801/295-1698	Edge of the Century, Bountiful, UT
801/963-8721	Rocky Mountain Software
802/656-1182	Vermont Ed-Net BBS, Burlington, VT
803/552-4389	Earth Art BBS, North Charleston, SC
803/899-6940	Bedrock Cafe, Pinopolis, SC
804/467-1835	The Phoenix BBS System, VA Beach, VA
808/833-6862	Nookies in the Crater, Honolulu, HI
813/538-7090	Tech Data Connection, Clearwater, FL
813/286-7084	The Godfather BBS, Tampa, FL
815/337-0191	BMC West BBS, Woodstock, IL
816/331-5868	Howard's Notebook, Belton, MO
909/336-6080	Mountain Air, Cedar Glen, CA
909/780-5672	ECTECH, Riverside, CA
909/247-2972	Seven Seas BBS-Moreno Valley, CA
909/381-6013	RBBS-NET Gateway, Colton, CA
913/681-5683	Nuclear Fusion, Overland Park, KS
913/776-0111	Fox Support System, Manhattan, KS
916/344-8146	SILVERADO EXPRESS, North Highlands, CA
918/835-6347	Big Dreams CEC, Tulsa, OK
918/438-7837	Calaeryn, Tulsa, OK
919/319-1814	deltaComm Online, Cary, NC

919/481-4896 AppleSeeds TeleFinder, Cary, NC  
 +61-051-56-8609 Bairnsdale BBS, Victoria, Australia  
 +61-3-482-2942 Permaculture 1 BBS, Northcote, Australia  
 852/572-3145 Hong Kong Computer Society BISSIG

## Large General-Interest Commercial Online Services

Advantages of commercial systems are that in most cases they are well-funded and well-developed and that most are easier to use than the vast Internet. Because most of the services have promotional fliers or kits, a voice telephone number has been given. Most of these services have local access numbers in urban areas; many charge extra for connections from outside the United States and several are telnet sites on the Internet. Prodigy now provides Internet E-mail service. Don Rittner's book *EcoLinking* (listed in the References) discusses several of these services in greater depth.

### America Online

America Online, Inc.

Voice Number: 800/827-6364.

Description: AOL has several environment-related areas.

Environmental Club—The Environmental Club includes message areas on global and national environmental issues, news from the Associated Press, and files from the Environment News Service and other services. The Environmental Club is hosted by Don Rittner, author of the book *EcoLinking* (see References). Some members of the Society for Environmental Journalists and the National Association for Agricultural Journalists have AOL accounts. National Geographic Online—The National Geographic area includes a calendar of events, the National Geographic, educational materials for all ages, news and other features. Network Earth Online—Network Earth Online, developed and managed by Turner Broadcasting, allows AOL subscribers to communicate directly with the producers and viewers of the weekly environmental magazine program *Network Earth* (it's on the cable station TBS at 11 p.m. Eastern time on Sundays). A message boards and "live" conferences are available, as are Network Earth transcripts, previews of upcoming shows, and tips on "how to live a more environmentally friendly life." Information about current and pending environmental legislation is posted, as well as Congressional voting records from the League of Conservation Voters. Subscribers can also search the resource library for press releases, executive summaries, reports, book reviews, and background information on environmental topics, or search for organizations that are working on such issues. Smithsonian Online—In the Smithsonian Online area there are photos, in GIF (Graphic Interchange Format) form, of animals at the National Zoo in Washington, DC, and photos from the National Museum of Natural History.

America Online users can exchange mail with users of Internet, BITNET, CompuServe, MCI Mail, AT&T Mail, AppleLink, Sprint Mail, and other Internet-connected systems. The Internet conduit is rather constraining, as of September 1993, but expanded access should be available soon, if it isn't by now. Alos under development is a project with Genentech to provide a forum that high school biology teachers could use to keep up with scientific advances. There are local access phone numbers for most United States cities.

Prices are generally around \$9.95 per month for 2400 bps (bits per second) access.

### CompuServe Information Service, Inc.

Voice Number: 800/848-8990; 617/457-8650.

Description: Two areas of primary interest are the Outdoors Forum and the Network Earth Forum. Both have message areas and file areas.

Outdoors Forum: GO OUTDOORS—File and message areas. The file library categories: General/Photography, Scouting, Power Boating, TROUT UNLIMITED, Fishing, Hunting, Cycling, AUDUBON/Birding, Canoe/Kayak/Raft, Camp/Hike/Walk/RV, Snow Sports/Climb, OWAA, CIS/Computers, Firearms, NRA, Environment/Wildlife, OUTDOOR LIFE magazine.

TBS Network Earth Forum: GO EARTH—See this entry under America Online. Message areas and file libraries include: Air/Climate, Water, Lands and Forests, Wetlands, Recycling, Wildlife, Energy, Pollution, Earth Graphics, Green Business, EcoNet/EWire, and American Fisheries Society.

CompuServe also offers access to some of the databases listed below in the DIALOG entry, through their Knowledge Index (GO KI) and IQuest (GO IQUEST) services.

Since CompuServe has a mail gateway to BITNET/Internet, it is possible to subscribe to the BITNET lists described in Part 2 of this document, although the cost of doing so may make it impractical. CompuServe subscribers can also send/receive E-mail to/from BITNET, Internet and MCI Mail, as long as the subscriber knows the electronic address of the recipient.

### Delphi

Voice Number: 800-695-4005; 617-491-3393

Description: We know little of Delphi other than their Internet access program, wherein on evenings and weekends subscribers pay \$20 per month for 20 hours on Delphi/the Internet. Delphi also has a \$10/4 hours plan, and an introductory \$5/5 hours plan.

### GEnie (General Electric Network for Information Exchange)

Voice Number: 800-638-9636; 301-340-4000

Description: GEnie is one of the cheapest of the large online services; connectivity to other systems appears to be quite limited. Prices are around \$4.95/month, as long as you log on during the non-prime hours of Monday-Friday, 6 p.m. to 8 a.m. During prime time the charge is \$18 an hour.

### The WELL (Whole Earth 'Electronic Link)

Voice Number: 415-332-4335

Description: The WELL is a conferencing, E-Mail, and real-time chat service that was created in the mid 80s in the offices of the Whole Earth Catalog. Its users include writers, editors, consultants, librarians, educators, artists, computer software and hardware professionals. Unlike most of the other commercial services listed here, there are few shareware and text file areas on the WELL; its purpose is to be an electronic gathering place, or perhaps more precisely, a "virtual community." Environment Conference—The WELL's Environment conference currently has ongoing discussions on almost 400 separate topics, such as "Shadow ecologies: progressive interlocking of ecology and economics," "Who or what do environmental agencies represent?," "Environmentalism vs. property rights," "Climate destabilization," and "The Great Flood of 1993: The Price for Decimating Our Wetlands?" Wildlife Conference—The Wildlife conference is "a place to discuss the flora and fauna of our world," as well as the threats to their habitats. The energy conference discusses "from global effects of fossil or nuclear energy to where to buy energy-saving light bulbs or solar hot water systems." The agriculture, gardening and science conferences are also of interest, as is the electronic discussion with the researchers inside Biosphere 2 enclosure in Oracle, Arizona.

WELL users have full (non TCP) access to the Internet, including mail, Gopher, telnet, and ftp, and USENET newsgroups.

Prices are \$15 per month, with a \$2 per hour connect charge; callers not in the local area can telnet in from the Internet or can use CompuServe's packet switching network for an extra \$4 per hour. There are additional charges for high-speed access.

## Database Vendors

Most of the following information retrieval services are for professional searchers and require specialized training to use economically. Some charge over \$2 per minute for searching and more to display full records; there usually are no text or program files available for downloading.

Often the information available is generated by database producers who sell the information to database vendors. The information might be newspaper, magazine and scholarly journal articles (or summaries of them), legal records, tabular financial data or various directories and indexes. The producer may be a subsidiary of the vendor or a separate company. Vendors sell access to the information, many by the month and by the hour, or by the hour with a yearly subscription fee. There is usually a by-the-record charge as well.

For example, the producers of the Aquatic Sciences and Fisheries Abstracts database are the National Oceanic and Atmospheric Administration (NOAA) and Cambridge Scientific Abstracts. This database is available through several vendors, including DIALOG. Cambridge Scientific Abstracts also makes it available on CD-ROM disc.



Libraries of corporations, universities and other organizations are the biggest users of online databases. Washington, DC is the home of many such libraries, including that of the National Wildlife Federation, World Wildlife Federation, National Geographic, and those of the Energy and Interior departments. The 20-plus libraries indexed in the "Environment and Ecology" category of the 1992 Washington Area Library Directory (District of Columbia Library Association), subscribe to the following services: DIALOG (18 libraries), LEXIS/NEXIS (9), OCLC (6), Orbit (4), Congressional Quarterly Washington Alert (4). BRS, STN, Westlaw, LEGI-Slate and EPIC get three mentions each. We've included information about the most popular vendor, DIALOG, below.

The easiest way to determine which vendor would be best for your needs may be to first determine the type databases you need. Your local library may have a reference work such as the *Directory of Online Databases* edited by Kathleen Young Marcaccio for Gale Research, Inc. (see References). Barbara Palladino's "Databases: Sprouting Up Green," which appeared in the September, 1993, issue of *Online Access* magazine, may also be useful.

As most university libraries and large public libraries have online searching services or can point you to information brokers who already subscribe to these services, you could have searches run for you. It may be more economical to do so.

### DIALOG Information Services

Voice Number: 800-334-2564; 415-858-3785

Description: DIALOG provides access to over 400 databases; the following databases are included in DIALOG's 1993 Database Catalogue. From the environment DIALINDEX subject category:

**AQUATIC SCIENCES AND FISHERIES ABSTRACTS**—U.S. National Oceanic and Atmospheric Administration/Cambridge Scientific Abstracts. Citations to 5,000 primary journals, monographs, conference proceedings and technical reports.

**BIOSIS PREVIEWS**—BIOSIS. Citations from Biological Abstracts, Biological Abstracts/RRM (reports, reviews, meetings), and BioResearch Index. Over 8 million records.

**BNA DAILY NEWS**—Bureau of National Affairs. Daily news coverage of developments from the White House, Congress, federal and state agencies, the courts, non-U.S. governments and private organizations. Includes *Environment Daily*, *Environmental Update*, *National Environment Daily*, *State Environment Daily*, *California Environment Daily*, *Toxics Law Daily*, and others.

**CA SEARCH**—Chemical Abstracts Service. Over 10 million citations to the literature of chemistry and its applications.

**CAB ABSTRACTS**—Commonwealth Agriculture Bureaux International. Worldwide agricultural and biological information, 8,500 journals in 37 languages are scanned for inclusion, as well as other media.

**Ei COMPENDEX Plus**—Engineering Information, Inc. Online version of The Engineering Index, information from the world's significant literature of engineering and technology. 4,500 journals and selected government reports and books.

**CRIS/USDA**—U.S. Dept. of Agriculture. Information on federal- and state-supported research in agriculture, food and nutrition, forestry, etc.

**EMBASE**—Elsevier Science Publishers. Biomedical and pharmacological literature.

**ENERGY SCIENCE & TECHNOLOGY**—U.S. Dept. of Energy. Literature references on all aspects of energy and related topics, including nuclear, wind, fossil, geothermal, tidal and solar.

**ENVIROLINE**—R.R. Bowker. Management, technology, planning, law, political science, economics, geology, biology, and chemistry as they relate to environmental issues; includes periodicals, government documents, industry reports, proceedings of meetings, newspaper articles, films, and monographs. 5,000 international primary and secondary sources.

**ENVIRONMENTAL BIBLIOGRAPHY**—Environmental Studies Institute. Covers general human ecology, atmospheric studies, energy, land resources, water resources and nutrition and health.

**FEDERAL REGISTER**—U.S. Government Printing Office. Full text of the Federal Register, a daily publication of the U.S. government that serves as the medium for notifying the public of official agency actions.

**GEOARCHIVE**—Geosystems. Covers all aspects of geoscience, primarily featuring mining, mineral processing, energy sources, fossil fuels, hydrology, water resources, environment, and conservation.

**GEOBASE**—Geo Abstracts, Ltd. Covers worldwide literature on geography, geology, ecology and related subjects.

**NEWSEARCH**—Information Access Company. An index of news stories, articles and book reviews taken daily from over 1,700 newspapers, magazines and periodicals.

**NTIS**—National Technical Information Service, U.S. Dept. of Commerce. Results of U.S. government-sponsored research, development, and engineering, plus analyses prepared by federal agencies, their contractors and grantees.

**OCEANIC ABSTRACTS**—Cambridge Scientific Abstracts. Oceanography, marine biology, marine pollution, ships and shipping, geology and geophysics, meteorology, and governmental and legal aspects of marine resources. 3,500 worldwide sources.

**PAIS International**—Public Affairs Information Service. An index to the public policy literature of business, economics, finance, law, international relations, government, political science, and other social sciences.

**PAPERCHEM**—Institute of Paper Science and Technology. Covers international patent and journal literature related to pulp and paper technology and related subjects.

**POLLUTION ABSTRACTS**—Cambridge Scientific Abstracts. Covers air pollution, environmental quality, noise pollution, pesticides, radiation, solid wastes, water pollution, and related subjects.

**PTS NEWSLETTER DATABASE**—Predicasts. Includes the full text of over 500 business and trade newsletters from 50 industries. **PUBLIC OPINION ONLINE**—Roper Center for Public Opinion Research. Full-text of public opinion surveys conducted by Roper.

**TOXLINE**—U.S. National Library of Medicine. Covers the adverse effects of chemicals, drugs and physical agents on living systems.

### Additions from the POLLUT subject category:

**OCCUPATIONAL SAFETY AND HEALTH**—U.S. National Institute for Occupational Safety and Health Technical Information Center.

**WATER RESOURCES ABSTRACTS**—U.S. Dept. of the Interior.

**WATERNET**—American Water Works Association.

Also available:

**AGRICOLA**—U.S. National Agricultural Library.

**LIFE SCIENCES COLLECTION**—Cambridge Scientific Abstracts.

Cost: \$50 first year, \$75 each year afterward, plus connect charges, which can be \$2 per minute.

### NEXIS/LEXIS

Mead Data Central

Voice Number: 800/227-4908

Description: The primary reason LEXIS was created was to make legal information available to law firms. NEXIS has a more generalized media mix and was added later to supplement the LEXIS service. [Neither co-author subscribes to these services.]

### LEGI-SLATE

A Subsidiary of The Washington Post Company

Voice Number: 800/733-1131

Description: This service monitors congressional activity and makes available committee reports, bill text, status and analysis of Federal regulations. Also available are the transcripts of press briefings, speeches, hearings, and television news and interview programs. [Neither co-author subscribes to this service.]

**NEWSNET**

NewsNet, Inc.

Voice Number: 800/952-0122

This service provides businesses information from many sources, including over 600 newsletters, Associated Press, United Press International, and Reuters news wires, the Federal News Service and PR Newswire. Four publications of interest are from Environmental Information Networks, Inc., and are posted nightly to NEWSNET. Alternative Energy Network Online Today focuses on global news on all energy sources designed as alternatives to conventional fossil fuels, and Clean Air Network Online Today reviews news related to the Clean Air Act and similar local, national, and international issues. Global Warming Network Online Today and Ozone Depletion Network Online Today are also available. [Neither co-author subscribes to this service.]

**Dow-Jones News/Retrieval**

Dow Jones & Company, Inc.

Voice Number: 602/520-4000

Description: Dow-Jones is a financial service, providing information on stocks, bonds, mutual funds, futures, and companies/competitive intelligence, from many sources. [Neither co-author subscribes to this service.]

The above is not a comprehensive list; for more information, see Gale Research's Directory of Online Databases and Barbara Palladino's "Databases: Sprouting Up Green."