Rain Monthly Newsletter of ECO NET

ECO-NET

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Agriculture - Food

People and Land
Center for Rural Studies
345 Franklin St.
San Francisco, Calif. 94102


"What is money? It comes quickly and is spent and gone. But the land is there forever. What good is money compared with land? If land is torn up, if the water is taken, our people will starve."

(Mina Lansa, Hopi leader)

International Independence Institute, Inc.
West Road, Box 183
Ashby, Mass. 01431

Since 1967 providing people with information and consultation about land tenure, reform, land trusts, credit and financing, intermediate technology, small scale farming and business enterprises. Ask for publications list, and sample newsletter (which is $10/year).

The Pacific Homestead
Published in the early 1900's out of Salem, Oregon. An agricultural tabloid.

Family Storage Plan
Bookcraft Publishers
1848 W. 2500 S
Salt Lake City, Utah 84120

$1.95. From the Mormons, who have practiced storage as an alternative insurance for years.

How to Grow More Vegetables
Ecology Action of the Mid-Peninsula
2251 El Camino Real
Palo Alto, Calif. 94306

Recommended to me by a friend who grew his stuff this year following the book's suggestions with real success.

Ceres
Bimonthly Periodical of The Food and Agriculture Organization of the United Nations
Powers International, Inc.
551 5th Ave.
New York, N.Y. 10017

$6/yr.

There is an international food crisis, and here's a periodical giving you some of the stories. Also contact Friends of the Earth, 529 Commercial St., San Francisco, Calif. 94111. Through their Rome Food Eco. project, hoping to present information to the World Food Conference happening in Rome this month.

Farm Town, A Memoir of the 1930's
Photographs by J.W. McManigal; text and additional photos, Grant Heilman.

Stephen Greene Press
Brattleboro, Vermont 05301

$7.95

Photographic portrayal of the depression and rural life.

Soybeans have become the leading U.S. export, surpassing sales of wheat, corn, and even high technology products, like computers. America produces two-thirds of the world's soybean crop, and supplies 90% of all soybeans entering the world market.

The Magic of Findhorn Gardens
Paul Hawken, East West Journal
31 Farnsworth St.
Boston, Mass. 02210

Peter and Eileen Caddy through communication with an assortment of gods, or voices, or strange impersonal mental communications, began Findhorn in 1962. Pan and 40-lb. cabbages, harmony and unsettling your normal feelings about agriculture.

When you get down to your last bean, your backbone and your navel shakes dice to see which gits it.

National Federation of Settlements and Neighborhood Centers. 232 Madison Ave. New York, N.Y. 10016

Oregon Architectural Barriers Council Portland Chapter 1954-A SE Hemlock Portland, Or. 97214 282-2667

OABC is concerned with the removal of architectural barriers. Emphasis on surveying buildings to determine accessibility, speaking on architectural barriers, legislation and sexual barriers affecting the handicapped.

see also Energy, Networks, Positions

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**AIR**

**AIR POLLUTION POTENTIAL ISOPLETH MAP**

Map shows western Oregon and western Wyoming have highest pollution potential in nation, much higher than heavily industrialized Illinois, Pennsylvania. Key to future livability is proper planning now.

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**ARCHITECTURE**

Small Homes Council—Building Research Council
University of Illinois, Champaign-Urbana
One East St. Mary's Rd.
Champaign, Ill. 61820
Technical notes, research reports, circulars, instruction sheets.

*Kitchens for Women in Wheelchairs.* Circular No. 841, 76 pp. $7.95.

*Applications of Treated Poles and Posts for House Construction.* TN No. 7. 28¢.

**A House for an Indian Family**
Len Dawson
Community and Organization Development
316 Lewis Hall, DW-20
U. of Washington
Seattle, Wash. 98105
$1.00

American Institute of Architects
1735 New York Ave. NW
Washington, D.C. 20006

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**ART**

Archives
The University of Washington is at present compiling information on the work of Northwest craftsmen. Under Washington's 1% for Arts program. Contact in Oregon: Archives, c/o Contemporary Craft Assoc., 5934 SW Corbett, Portland, Or. 97201.

Metropolitan Arts Commission
522 S.W. 5th, Rm. 1221
Yeon Bldg.
Portland, Ore. 97204
248-4569

Funded jointly by city and county. Facilitation of problems-solving through use of ongoing artist organizations, and extending participation in the arts by enabling groups to put on "benefits," etc. Also function as liaison between artists and groups and government agencies, artists in schools, Saturday Market, Portland Poetry Festival, neighborhood concerts, friends of cast iron architecture are some of the activities partially funded. Also general clearing house function, on information about arts.

N.W. Experiments In Art and Technology (E.A.T.) ...
... is an information referral phone maintained by Jack Eyery, 225-7898, linking people working in new and traditional art media. N.W. connection for computer, video, film, laser, electronic systems and information art. Mail address: 1990 SW Mill St. Terrace, Portland, Ore. 97201.

Oregon Committee for Art in Public Places
177 N.W. 5th
Portland, Ore. 97209
Terri Hopkins, coordinator, 227-4710
222-7107

Supports legislation in state of Oregon, Multnomah Co. and Portland ... and other interested communities ... Already in effect in Hawaii, Washington state, Seattle and King County, San Francisco, Baltimore and many other areas, this kind of legislation provides that a percentage of public construction money will be used to purchase and commission works of art. $2.00 membership.

Terri did a study for Oregon Planning Commission recommending specific legislation for state of Oregon based on precedent in other communities. Complete study available from Oregon State Capitol Planning Commission, 494 State St., Rm. 324, Salem, Ore. 97310.

Ph: 578-8165. 50¢ (J.E.)

Oregon Volunteer Lawyers for the Arts.
Northwestern School of Law/Lewis & Clark College
10015 SW Terwilliger Blvd.
Portland, Ore. 97219
Leonard D. DuBoff, 244-1181

Assistance to the artist and art associated problems. Legal panels specializing in tax, film, women's problems, contracts, obscenity, property rights, etc. Available to those meeting the requirements for legal aid.

Sponsored Conference on Law and the Visual Arts, March, 1974, with international participants presenting experts in contracts, tax, obscenity, copyright, international theft, etc. Cassette tapes available from Mono-Sette Systems, Box 02126, Portland, Ore. 97202.

Write for catalog.

Currently Prof. DuBoff is teaching a PSU class "Law and the Visual Arts," stressing artist gallery negotiations and contracts.

see also Space, Audio-Visual
Northwest Conference on Alternative Agriculture

A forum for people seeking alternatives to current agricultural practices & attitudes

"The preservation of fertility is the first duty of all that live by the land... There is only one rule of good husbandry... leave the land far better than you found it.

George Henderson, The Farming Ladder

CENTRAL WASHINGTON STATE COLLEGE
Ellensburg, Washington

November 21 - 23, 1974

PROGRAM OUTLINE

Thursday, November 21:
9:00 am Registration in Munson Hall
1:00 pm Opening remarks SUB Theatre
• Speech by Wilson Clark, environmentalist and author of Energy for Survival: An Alternative to Extinction
• Introduction of Workshop Leaders
2:30 pm Break
2:45 pm Workshop Series #1 SUB
These workshops will address themselves to specific agricultural techniques and environmental problems, and will be led by resource people from around the Northwest.
4:00 pm Break

November, 1974

4:15 pm Workshop Series #2. Repeat of earlier series.

5:30 pm Dinner Old-timey Music

7:15 pm Renewable Sources of Energy: Presentation by Lee Johnson (Energy Center, Oregon Museum of Science and Industry, Portland), Ken Smith (Ecotope Group, Seattle), and Evan Brown (Ecotope) McConnell Hall

8:30 pm Keynote Speech McConnell Hall
Richard Merrill, biologist from the New Alchemy Institute West; author of Radical Agriculture

Friday, November 22:
8:00 am Renewable Sources of Energy: Workshop/Seminars. Demonstration of a complete, complimentary energy system composed of a wind charger, flat plate solar collector, and methane digester. Munson
• Wind Power--Lee Johnson
• Solar Energy--Ken Smith
• Water power--Bruce Franklin, electrical engineer, Seattle
• Bio-conversion energy--Evan Brown, Richard Merrill
• Ecological Building Practices--Len Dawson, Housing Assistance Group, Seattle.

12:00 Lunch

1:00 pm Land Reform, Land Use Planning, & Rural Communities: Panel presentation, followed by general discussion or by specific workshops.

Hertz Auditorium
-- James L. Draper, Executive Director of the Center for Rural Studies, S.F.
-- Ron Erickson, Committee on Critical Choices for Americans, N.Y.C.
-- Clayton Denman, President, Small Towns Institute, Ellensburg
-- Alan Halvorsen, Kittitas County Action Council, Ellensburg
-- Don Newey, Farmco Associates, Santa Cruz, California
-- Tom Bahr, Evergreen Land Trust Association, Clear Lake, Washington (not confirmed)
-- A representative from the United Farm Workers, to be determined.

5:30 pm Dinner Address by Ron Erickson

8:00 pm Unfinished business Munson and additional informal workshops from earlier sessions.
• Videotape of Wendell Berry’s speech at the “Agriculture for a Small Planet” Symposium at Expo 74
• Film, “The Richest Land”
Saturday, November 23:
9:00 am Alternative Marketing, Economics, and Finance

SUB

The format and participants for this session are not yet final; Buying groups, farmer-consumer co-ops, crop contracting by co-ops, farmers' markets, community development funds, and organic certification programs will be discussed.

--Don Newey, founder of Devcor and Farmco; author of "What Price Miracle?"
--Pat and Dorothy Langon, President of N.W. Organic Food Producers Ass'n.
--Don Shakow, Alternative Finance, Seattle (not confirmed)

12:00 Lunch

1:00 pm OPEN FORUM

Munson

We'll continue as long as the energy holds out; the facilities will be open through Sunday, November 24.

General Information

Housing: We have reserved the use of Munson Hall, a comfortable old dormitory of 119 beds, for the entire conference period. The facilities consist of 2 beds to a room, 2 rooms to a bath, and are available at a cost of $6.00 per person, per day. We'd like to see a kind of group feeling emerge at this conference, the kind that results when everyone is living and working together, and Munson is the right sort of place for this to happen. We encourage you to make use of it, but if you absolutely can't afford the rooms, let us know and we'll try to arrange some place for you to roll out a sleeping bag.

Meals: While we can't provide all of the meals for the conferences period, we are planning to put together Natural-Foods, low cost (about $1.50) dinners for Thursday and Friday evenings, and we hope that everyone will take advantage of these additional opportunities for exchange.

Child Care: We'll set up a co-operative child care facility, so that those of us with little people can take turns.

Information Center: There will be a series of tables set up in Munson Hall for the distribution and sale of papers, articles, and books. We invite you to bring and display any informative brochures or other printed materials which might be of interest to others at the conference.

This conference is sponsored by Tilth, a newly-formed, non-profit educational organization; tax-exempt status is pending. Tilth's address is Poplar Hills, Route 1, Box 64, Palouse, Washington 99161.

List of video-tapes produced for low-energy living.

List prepared for course taught at university.

Environmental Education: A Beginning

Division of Tech. and Env. Ed. Office of Public Affairs

U.S. Office of Education

Washington, D.C. 20202

Free Rental Film. (L.W.)

see also Media, Information

COMMUNITY

A recent study of urban communes in Minneapolis, sponsored by the American Assoc. for the Advancement of Science, found that energy use was lower in urban communes than in conventional urban homes.

Center for Urban and Regional Studies

University of North Carolina

Chapel Hill, N. Carolina 27514

Opinion survey/study of quality of life, from 7,000 people in 36 "new" communities. continued on page 7
ECO NET REPORTS

EEC

Responses to Rain have been very encouraging. The first issue was distributed to 3,000 people. At least 75 people responded by letter or phone in the best way possible: by contributing information. As the SHARE program develops we will try to develop readership and with helpful information.

ENVIRONMENTAL FIELD TRIPS

I am currently designing for the Environmental Education Center, a list of field trips which will help sensitize young people to the idea of man’s interrelationship with nature. The proposed age group these trips would be designed for would be grades 6-12. Concept areas I hope to cover would include: Clean air, levels of the biosphere, auto emissions, factories, industry, pollution control, inspection of rivers, lakes, sewage outfalls, fish and other aquatic life, dams and their effects, finiteness, recycling, the dump, the biological food chain, the effects of DDT and other pesticides, wildlife and their needs, endangered species and why, a look at the land, man’s use of the land, erosion and its effects on rivers, fish, and the quality of soil, BLM, LCDC, OCCDC, the forest and effects of clear cutting, vegetation types and roles in the forest, Forest Service, the concept of growth, freeways and their effects, invitations to growth (sewer lines, new housing) DEQ, CRAG, historic landmarks and their significance.

–Nancy Randall

ENVIRONMENTAL EDUCATION IN OREGON

Last March, EEC volunteer Olivia Froebe completed a survey of environmental education in Oregon. These are some results:

• 36 school districts, IED, state, and federal government staff, and private people in Oregon are serving as advisor or consultants to environmental education projects. (We’re sure this number is larger.)
• 34 high schools or junior high schools out of 227 in Oregon offer courses in environmental studies. This year, with new graduation requirements, this number is probably larger.
• 39 special projects or programs are available to Oregon primary and secondary students (not counting outdoor schools) ranging from ecology days, to nature study areas, to school yard projects.
• 3 K-12 environmental education programs exist or are being planned:
  Ashland District No. 5 contact: Vern Speirs
  Parkrose District contact: Max Brunton
  (K-12 Student techniques in Environmental Problem Solving)
  Eugene District 4J is developing a K-12 program with the following themes: K-4 Sense of Wonder
  4-7 Uses and Abuses of Our Local and World Environment
  8-12 “Responsible action will be pursued through awareness and action on local environmental problems.”

If you have additional information about environmental education in Oregon which will help us complete our files, please let us know.

–Laura Williamson

ENVIRONMENTAL EDUCATION CONFERENCE

Laura, Anita, and Steve are working on a workshop for the conference, “Environmental Education Public Relations Plan.” Attempting to provide information and people in the general area of media information dissemination and program support. (See Calendar.)

ECO-NET MEETING

The follow-up to the Boise meeting in September will take place in Spokane on November 15 and 16, to discuss the alternatives available for the establishment of an environmental education/information network in the Northwest.

DON STOTLER? WELL, following one of Don’s threads (his desk calendar) we found he attended 57 meetings in October.

Energy Center

The information has begun to flow, and some of that is visible in this issue of Rain. Marcia Lynch has developed the Energy File Folder system, for general correspondence, energy centers, energy people, bibliographies, etc. Also a complete set of folders corresponding to a subject heading index in questionnaires which were sent out in August.

The revised questionnaire will be out in the first week of November.

A primary contact has been established with Julie Selby in the Oregon State Office of Energy Conservation and Allocation. Julie is developing energy information, especially designed for legislators, and it is hoped the Energy Center may provide the Energy Office and state government with abstracted or exhaustive information on energy topics.

Still available from Marcia Lynch, c/o Energy Center are information sheets on wind, solar, and methane energy. Also copies of speeches made by Ray Barrett, Director Education Department, OMSI, and Lee Johnson, Energy Center, at the Federal Energy Administration’s Project Independence Conference.

PUBLIC ACCESS MICROFICHE is a project to provide individuals and public interest groups with the ability to organize, film and share a common information base. After two months of work, Graham Hubenthal and Lee Johnson have found advantages in scope, cost and speed over conventional methods of information movement. Although microfiche cards can be designed for any topic, the authors have begun to develop an information bank on "energy and the environment" with a view towards duplicating this information file for use by new energy-environment information centers. Equipment for this project has been provided by Bell and Howell Microfilm Products, Portland. For a copy of A Proposal to Supply the Missing Link for an Information Network: Microfiche, write Marcia Lynch, Energy Center, Oregon Museum of Science and Industry, 4015 S.W. Canyon Road, Portland, Ore. 97221, or call (503) 248-5900.

SOLAR COLLECTOR MANUFACTURERS & DISTRIBUTORS, a list of 35 companies selling solar panels for space and hot water heating, has been prepared by Lee Johnson of the Energy Center and is now available for distribution. Send $1.00 to Marcia Lynch, OMSI Energy Center, 4015 S.W. Canyon Rd., Portland, Ore. 97221.

SHARE

Rusty Whitney and Bob Stilger have worked out arrangements for the first use of the experimental Eco/Net OMSI computer program, SHARE, which will enable people at 76-Week to get in touch with each other. (See Rain No. 1.)

NW ALTERNATIVE AGRICULTURE CONFERENCE

Lee Johnson and Ken Smith have pulled together the Alternative Energy Program for the conference (See pg. 4 & 5, this issue.) Also, the EEC is helping Mark Musick, one of the organizers, develop a people-to-people directory of the participants in an attempt to create a permanent network of agriculture and energy folk.
Environmental Symposium Series

Environmental Education Information Kit

A really fine package of free materials developed by Mary Feidt and Eric Boge. No longer available, so below is listed the individual materials included and where they may be gotten (many in multiple copies and free):


Publications Catalog. Rodale Press, Organic Farm, Emmaus, Pa. 18049. (The organic gardening people)

Working for a Better Environment, National Wildlife Federation, 1412 16th St., Washington, D.C. 20005

(Explains philosophy and programs of the N.W.F. Ask also for description of "discovery units.")

America Was Trees, from Scott, Foresman, and Co., 855 California Ave., Palo Alto, Cal. 94304.

Short reprint on environmental movement history, excerpted from U.S. History: Search for Freedom.


Recycling education curriculum.

Environment and Outdoor Education Materials Co., Dowling, Mich. 49046

Surprisingly practical How-To books. $2.00 for complete catalog. Free two-page flyer.


Especially good urban environment approach.

Arthur Barr Productions, P.O. Box 7-C, Pasadena, Calif. 91104.

Environmental Films.

Instructional Dynamics, Inc., 166 E. Superior St., Chicago, Ill. 60611. Learning cassettes.

Scott, Foresman, 855 California Ave., Palo Alto, Cal. 94304.

Booklet size materials.

Environmental Education Bibliography

Prepared by Environmental Symposia Center, available from Environmental Education Center.

Environmental Games and Simulations, compiled by Tom Eckman, Environmental Symposia Center, available from Environmental Education Center.

Institute for Environmental Education, 8911 Euclid Ave., Cleveland, Ohio, 44106.

Ask for general and publication information.

SIRS, Gaylord Bros., Inc., P.O. Box 61, Syracuse, N.Y. 13201

Publisher of social issue curriculum, based mostly on reprints from magazines.

see also Architecture, Associates

CONSCIOUSNESS

Mental Health Association of Oregon
718 W. Burnside
Portland, Ore. 97209
(503) 228-5571

Metro Education Bulletin, Bulletin Board of groups, conferences, sessions monthly in Portland area: transactional analysis, self-awareness, encounter, etc.

Bioenergetics Northwest
3938 First Ave NE
Seattle, Wash. 98105

Consciousness expansion and equilibrium development through talking to/working with body processes. (See Calendar.)

see also Agriculture

EDUCATION

Oregon Museum of Science and Industry, Classes for Children
Began November 9. Write or call for details.
4015 SW Canyon Rd., Portland, Or. 97221.
248-5906

Woodcarving Class.
Now under way at Western Forestry Center. Presented by them and Western Woodcarvers Association. Eventual showing of work done. Western Forestry Center 4033 SW Canyon Rd. Portland, Or. 97221

Do It Yourself Environmental Handbook, Dayton Museum of Natural History, 2629 Ridge Ave., Dayton, Ohio 45414. $1.95.

Ecological Action Check List, Ecology Center of So. Calif., 2915 Westwood Blvd., Los Angeles, Cal.


Films strips for sale.

Environmental Choices, Metropolitan Life, P.O. Box 232, New York, N.Y. 10010

A multi-media inquiry and decision-making approach. $18.50.


Publishers of the very good monthly report. $15/yr.

Environments for Learning, Box 4174, Madison, Wisc. 53711

David Archbald and Noel McInnis (former Director of Center for Curriculum Design). Some of the best whole-systems environmental materials.

"Toward a Higher Education" Issue devoted to that, from East West Journal, Sept., 1974, 50¢ 31 Farnsworth St.

Boston, Mass. 02210

Encounter with the Northwest Environment, Natural and Urban
Tony Angell, Coordinator
Available from: Superintendent of Public Instruction, Olympia, Wash. 98504

The best guide to Northwest environment I've ever seen. A beautifully designed and thought-out guide to ecological systems, importantly the first to include rural, wild, and urban. The actual descriptive tour is based in Washington.

Earth Journal
Minnesota Geographic Society
1501 S. 4th St.
Minneapolis, Minn. 55404

Bi-monthly, $3 annually, 50¢/issue

The Tao, Experiment in Common Life, Lindbergh, Poetry, Aphrodisiacs, Breastfeeding, Woodworking, Herbs, Still a Small Planet, Methane. Excellent

Classes 76
Jeff Hanson
Whitworth College
Spokane, Wash. 99251

Whitworth College is an information center for exchange/dialogue developed out of a May, 1974, meeting.

"The basic idea of the Classes '76 model is that schools will study the fundamental questions which are now challenging education and only when this has been done would they look at such issues as grades, types of courses, year-round education, etc."

The Whitworth Communication Center will operate using a toll-free 800 telephone line, information being logged on terminal computer lines. Also use of newsletter on Classes '76 issue. National briefing session, Nov. 1, 1974, Expo.

continued on page 8

Page 7
EDUCATION
continued from page 7
Columbia Educational Center
5523 SE 47th
Portland, Ore. 97206
Founded in 1973. National conferences on
education (see Calendar). Publications, proposal
development, program evaluation, dissemination.
Especially interested in school within
school programs.

Environmental Education Networks:
Environmental Ed. Reporter
1621 Connecticut Ave. NW
Washington, D.C. 20009
$18/yr.
Alliance for Environmental Ed.
Jack Snell, Exec. Director
635 S. Main St.
South Bend, Ill. 46673
Conservation Education Assoc.
Jane Westerberger, Pres.
USFS Office of Info.
630 Sosome St.
San Francisco, Cal. 94111
Western Regional Env. Ed. Council
Randy Schaeffer
721 Capitol Mall
Sacramento, Cal. 95814
Assoc. for Environmental and Outdoor
Ed.
2428 Walnut Blvd.
Walnut Creek, Cal. 94596
Institute for Environmental Ed.
8911 Euclid Ave.
Cleveland, Ohio 44106
I.C.E.
1927 Main St.
Green Bay, Wis. 54301
Environmental Ed. curriculum development.

Division of Technology—Environment-
al Education
Walter Bogan
Dept. Health, Education, Welfare
Washington, D.C. 20202
For who submitted proposals for
project funding.
Menucha, Oregon, Environmental Ed.
Conference
Ernest McDonald
U.S. Forest Service—Region X
324 SW Pine
Portland, Ore. 97208
Center for International Environment
Information
345 E. 46th St.
New York, N.Y. 10017
Correspondents, participants in preparation
for proposal for U.N. Environment
report.

Police Environmental Awareness Program
Mr. Edward L. Verse
Administration, Commissioner of Parks
830 5th Ave.
New York, N.Y. 10021
Margaret Allen
Conservation Dept.
United Auto Workers
8000 E. Jefferson
Detroit, Mich. 48214
Alternatives in Education
Portland Scribe
Oct. 5-11, 1974
A good issue on alternative education pro-
jects and ideas in the Portland area. Include
50¢ in request.

see also Audio-Visual, Eco-Net, Information,
Social Services

ENERGY
National Energy Information Center
Federal Energy Administration
4508 New Post Office Bldg.
12th and Pennsylvania Ave. NW
Washington, D.C. 20461
Statistics, bibliographic materials, abstracts,
films. Studies "Petroleum Situation Report" (weekly);
"Energy Indicators" (monthly); "Petroleum Im-
port Weekly" (weekly). No charge to date for
inquiry. (202) 961-8685 or (202) 961-8486.

Continued growth produces goods that
have to be sold.
Promotion is so essential to marketing that
large corporations sink $20 billion every year into
advertising. But even with massive advertising
campaigns, markets become saturated and other
markets such as planned obsolescence are
necessary to create more markets. In addition
glutting the domestic market, sales increases
can be obtained by promoting new foreign
markets, especially in "underdeveloped" coun-
ties. Many parts of the world are being ex-
posed for the first time to the gadgetry owned
by most Americans, creating new demands for
more refrigerators, radios, televisions, cars,
motorcycles and air conditioners, and placing
new demands on the earth's already over-bur-
dened resource pool.

(Operating Rules for Planet Earth, Sam
Love. Copies from F.O.B. Clearinghouse,
Senator Bldg., Portland, Or. 97204)

National Governors' Energy Project
1150 17th St. NW
Washington, D.C. 20036
(202) 659-5644.
Energy Project. An attempt to index energy
research projects by state. Legal, economic,
conservation, agriculture, information.

Hot Water
350 E. Mountain Drive
Santa Barbara, Cal. 93108
March, 1974, $2.00
Storage tanks, soil collections, wood heat
storage units; how-to information on simple hot
water systems for home use. Neat illustrations
and general design.

Solar Energy Research Information Meet-
ing of NSF/RANN Grantees.
National Center for Energy Manage-
ment and Power
University of Pennsylvania
Collection of papers presented March,
1973, by National Science Foundation-funded
solar energy research projects. NSF/RA/N-73-075
Order from: NTIS
U.S. Dept. of Commerce
Springfield, Va. 22151

Solar Heating and Cooling Demonstration
Act of 1974
Recently signed into law. Congress has au-
thorized $60 million for five-year project, split
between NASA and HUD; the idea, to develop
ways to use solar power to heat and cool build-
ings at a more reasonable cost. A separate bill
to give as much as $1 billion for research and
development has passed the Senate.

COUNTOO
...COUNT THINGS AT YOUR SCHOOL THAT ARE NOT NORMALLY COUNTED...

* Broken Windows  * Rules
* Unused Books  * School Meetings
* Lost Things  * for Faculty
* Found Things  * Rats * Dogs
* Locks  * Trees  * Friends
* Telephones for Teachers Only  * Drugs
* Telephones Available for Students
* Places you can't get into  * Promises
* Rumors  * Holidays  * Groups  * Advertising
* Friendly Teachers  * Grouchy Teachers
* Pelicans

CARD NO. 13
HEAT—WINTER CONSERVATION

Layers of Clothes

Hot Bath
Flannel
Calk
Storm Windows
Closing Rooms
Shade Planting
Blankets
Warm Bricks
Attic Ventilation
Biking
Exercises
Candles
Hand Warmers
Rugs
Deep Breathing
Pipe Insulation
Night Setback
Wall Insulation
Hot Water Bottle
Compost
Earth Heat
Mittens
Quilts
Soup
Straw
Dirt
Weather Stripping
Ear Muffs
Long Johns
Shutters
Furnace Filters
Sealing Cracks
Air Lock Entrances
Heat Rises


Living with the Energy Crisis. Small Homes Council—Building Research Council, University of Illinois, Champaign-Urbana.


BPA Energy Alert. Energy Conservation Staff, Bonneville Power Administration.


Alternative Sources of Energy. RAND Corporation Publications Division.

Environmental Education Projects Funded by EEA Act of 1970, Energy Related

Jeff C. Jeffers
Alaska Department of Education
Environmental Education Office
Juneau, AK 99801
Tel: 907-465-2800
Oil Pipeline

NUCLEAR POWER BACKGROUND READING

George Carter
Trojan Visitors Information Center
Rt. 2, Box 120
Rainier, Oregon 97048
(503) 556-4741

Available from ANS, 244 East Ogden Ave., Hinsdale, Ill. Bulk copies: 100-499 @ $4, prepaid; 500-1,000 @ $54, prepaid.

In a clear and concise question and answer format, this publication covers all the basic issues in this area, including radiation, transportation, safety and siting, and considers such future sources of electric power as the breeder reactor and thermonuclear fusion. Includes illustrations, charts and an extensive list of references.

Sources of Information on Nuclear Power and the Environment, Power Planning Committee, Pacific Northwest River Basins Commission, P.O. Box 908, Vancouver, Washington, 98660; September, 1973; 28pp., n/c for single copies.

Will aid individuals in locating non-technical sources of information available on nuclear power and the environment in the northwest. It includes: (1) a listing of the principal agencies responsible for regulating nuclear power development; (2) a selected bibliography of publications; (3) a listing of additional sources.

Review of Power Planning in the Pacific Northwest, Calendar Year 1973, Power Planning Committee, Pacific Northwest River Basins Commission, P.O. Box 908, Vancouver, Washington, 98660; May, 1974; 112pp., n/c for single copies.

Describes new and continuing programs related to power and conservation in the Pacific Northwest. Covers power resources existing, under construction and feasible for future development.

Hydro-Thermal Power Program: A Status Report (for the Pacific Northwest), Bonneville Power Administration, 1002 N.E. Holladay, Portland, Oregon, 97229; 60pp., n/c for single copies.

Progress to date and problems foreseen in the future are the substance of this report. Particular attention is given to environmental considerations.

Northwest Power Pool, Northwest Electric Light and Power Association (NELPA), Mohawk Building, Suite 200, 222 S.W. Morrison Street, Portland, Oregon, 97204; 8pp., n/c.

A good simple answer to “What is the Northwest Power Pool?” It covers the history, how it works, and the benefits gained from the interconnection of its member utilities.


The study was performed under the independent direction of Professor Norman C. Rasmussen. The objective was to make a realistic estimate of public risks that could be involved in potential accidents in commercial nuclear power plants. It compares these with non-nuclear risks to which our society is already exposed. The methods used to develop these estimates are based on those developed by the Department of Defense and the National Aeronautics and Space Administration.

Power Generation Alternatives, City of Seattle, Department of Lighting, Gordon Vickery, Supt., Seattle, Washington, 98100; 176pp., $5.00.

The different energy resources and methods of utilizing them for the generation of electricity are explained. Associated environmental effects, means of storing energy and other factors are described so the reader will be able to evaluate alternate methods of supplying electricity.
SAVINGS thru INSULATION

IN AN AVERAGE HOME YOU CAN CUT YOUR ELECTRIC HEATING BY TWO-THIRDS THROUGH PROPER INSULATION

saving

YOUR ELECTRIC HEATING BY TWO-THIRDS THROUGH PROPER INSULATION

SAVINGS

1. INSULATE CEILING WITH 6 INCHES (R value 19)*
   SAVE 32% OF 33,564 KWH ................10,791 KWH

2. INSULATE FLOOR WITH 2 INCHES (R value 7)
   SAVE 7.5% ..................2,618 KWH

3. INSULATE WALLS WITH 3½ INCHES (R value 11)
   SAVE 11% ................3,677 KWH

4. INSTALL STORM WINDOWS (260 square ft. glass)
   SAVE 13.6% ................4,562 KWH

TOTAL SAVINGS .............21,648 KWH

*THE R VALUE AS APPLIED TO INSULATION, IS THE RESISTANCE TO HEAT TRANSFERENCE THROUGH THE INSULATING MATERIAL

EXAMPLE: SIZE OF HOUSE: 1800 SQUARE FEET
OUTSIDE TEMPERATURE: 10 DEGREES
INSIDE TEMPERATURE: 70 DEGREES

33,564 KILOWATT HOURS REQUIRED FOR HEAT PER SEASON

William V. Mayer
Biological Science Curriculum Study
P.O. Box 930
Boulder, CO 80302
Tel: 303-666-6558
Development of an energy use-systems ecology instructional module for secondary school students.

Howard D. Roark
The University of Colorado
Division of Continuing Education
970 Aurora
Boulder, CO 80302
Development of learning modules on exploration of future energy sources, designed for use at senior high and college levels.

Mrs. Sidney E. Sweet
League of Women Voters Education Fund
1730 M Street, NW
Washington, D.C. 20036
Tel: 202-296-1770, x211
Community education project involving integration of existing energy and land use resource material and technical assistance to local citizens groups in developing and implementing community environmental education programs around these issues.

Alberta C. Slavin
Utility Consumers' Council
7710 Carondelet, Suite 508
Clayton, MO 63105
Tel: 314-726-2500
Workshop on issues surrounding alternative energy sources and environmental quality.

Charles Kopman
Sierra Club
Ozark Chapter
P.O. Box 12424
Olivette, MO 63132
Tel: 314-727-2511
Workshops on problems, benefits and environmental consequences of nuclear power production and utilization in local area.

Otto Nuehardt
Custer County District High School
20 South Center
Miles City, MT 59301
Tel: 406-232-3840
Secondary program involving students in field and classroom studies of environmental issues surrounding local coal mining industry.

Morton A. Tavel
Vassar College Dutchess County Environmental Association
Raymond Avenue
Poughkeepsie, NY 12601
Tel: 914-452-7000, x270
Workshops on effects, issues and options related to nuclear energy production in mid-Hudson Valley area.

Duane E. Richardson
Northwest Regional Education Lab.
Computer Technology Program
710 S.W. Second Ave. & Lindsay Blvd.
Portland, OR 97204
Tel: 503-244-5659
Development of curriculum resource materials for secondary students using computer gaming/simulation approach to study dimensions of energy issue.

Donald W. Stotler
Oregon Museum of Science and Industry
4015 S.W. Canyon Road
Portland, OR 97221
Tel: 503-224-9500
Community education project focusing on energy-related issues, piloting environmental education resource center concept for museums of science and technology.

Kenneth Hammond
Central Washington State College
Environmental Studies Program
Ellensburg, WA 98926
Tel: 509-965-1401
Development of case study packets for secondary level use addressing energy issues and other selected environmental problems.

Rev. Melvin Tracy
Science--JFK Preparatory School
Box 109
St. Nazianz, WI 54232
Tel: 414-738-2111
Secondary school project for students involving development of working models of alternative energy production and utilization for community education.

Maurice F. Griffiths
Natrona County School District No. 1
8th and Elm Streets
Casper, WY 82601
Tel: 307-237-9571, x28
Secondary project involving high school students in comprehensive study of aspects of energy conversion plant siteing in a local area designated for that purpose.

Soap Making: A How-To Sheet
From: Recycling Switchboard
Dept. of Environmental Quality
Call 229-5555 in Portland

see also Government, Recycling, Architecture, Agriculture, Eco-Net
Please post near your telephone!

Emergency Numbers (24 hours a day)

First Aid (Immediate) Fire Bureau 248-2111
To Report:
Dangerous or dead animals Animal Control 666-3711
Neglected, abandoned children Police Bureau 226-7551 Ext. 238
Accident with injuries Police Bureau 226-7551 Ext. 225
Crime Fire Bureau 248-2111
Emergency street repairs City Engineer 248-4110
(after hours 288-5441)
Broken, frozen water mains
Broken fire hydrants Water Bureau 282-7201

Animals
Dead, loose, injured or biting animals; barking dogs Animal Control 666-3711 (24 hours a day)
Animal excrement, keeping of livestock and fowl Environmental Sanitation 248-3400
Excessive number of animals Bureau of Buildings 248-4230
Mosquitoes, Elm Leaf Beetles, other insects, identification and control Insect Control 289-3069
Rats Environmental Sanitation 248-3671
Adoption Animal Control 666-3711

Housing
New buildings or alterations Bureau of Buildings 248-4230
Interpretations of zoning laws Bureau of Buildings 248-4245
Dilapidated buildings

Vacant Buildings
Open, unboarded
Environment 248-4465
Deteriorated, Hazardous Bureau of Buildings 248-4230
Filled with debris Fire Bureau 248-4363
Illegal entry Police Bureau 226-7551 Ext. 265

Fire Hazards
Brush, weeds, vegetation as fire potential (lot or parking strip area) Environment 248-4465
Rags, debris, paper within building Fire Bureau 248-4363
Faulty wiring, code violations Bureau of Buildings 248-4200
Hydrant locations Water Bureau 248-4408
Prevention advice Fire Bureau 248-4363

Occupy limits (proposed) Bureau of Buildings 248-4245
Occupy limits (existing) Bureau of Buildings 248-4230
Seasonal outdoor burning permits Each local fire station

Fences & Hedges
Fences and/or hedges 3'6" and higher in front of yard, 6' in side or rear yard Bureau of Buildings 248-4230
Obstructing vision at intersection Traffic Engineering 248-4295
Obstructing passage on street, sidewalk or alley Bureau of Buildings 248-4230
Stagnant water:
On private property Environmental Sanitation 248-3400
In street area City Engineer 248-4110

Flammable papers, rags on vacant lots Environment 248-4465
Appliance auto parts stored on private property Bureau of Buildings 248-4230
Noise
Disturbance of the peace Police Bureau 226-7551
Barking dogs Animal Control 666-3711
Noise caused as a result of zoning violations (auto wrecking) Bureau of Buildings 248-4230

Health Problems
Rodent control Environmental Sanitation 248-3671
Refrigerators untended on property, with operable latch Environment 248-4465

Sanitation Problems:
Visible sewerage effluent Bureau of Buildings 248-4200
Raw garbage, lack of garbage pickup Environmental Sanitation 248-3671
Sub-standard buildings, animal excrement Environmental Sanitation 248-3400

Building Problems:
Bureau of Buildings 248-4230
Plumbing 248-4225
Building 248-4230
Housing 288-6077
Heating Systems 248-4230

Abandoned Autos On street or public property (legally parked) Environment 248-4465
Civic Auditorium 226-2876
Mentally Handicapped Park Bureau 248-4328
Memorial Coliseum 235-8771
Civic Stadium 248-4345
Arboretum Talks and Tours Park Bureau 228-8732
Forest Park Information Park Bureau 248-3580
Portland International Raceway 285-6635
Golf Courses 248-4311
Zoo 226-1561

Auto Wrecking On private property (illegal wrecking, repairing, housing of vehicles) Bureau of Buildings 248-4230
Repairing on street Police Bureau 226-7551 Ext. 231
Residential, design and permit City Engineer 248-4256
Car bodies and/or parts on street Environment 248-4465

Obstructions
Emergency street obstructions, public stairs, street repair and improvements City Engineer 248-4110
Carpool coordination and information Carpool 227-7665

Transportation
Service for aged and handicapped
Project Mobility 288-8391
Report lost Police Bureau 226-7551 Ext. 332

Bicycle Information
Auctions Purchasing Division 248-4395
Path Routing Bureau of Planning 248-4468
Registration Local Police Precinct or Fire Station

Pedestrian Hazard (Vehicles)
Car on or over sidewalk Police Bureau 248-4134
Pedestrian on or over sidewalk Police Bureau 248-4134

Maps
Sewer City Engineer 248-4165
Street City Engineer 248-4165
City Areas City Engineer 248-4165
Zoning Bureau of Planning 248-4250

Permits
Business License Bureau of Licenses 248-4066
Home Occupation (Business) Permit Bureau of Buildings 248-4230
Building Bureau of Buildings 248-4230
Building Demolition Bureau of Buildings 248-3400
Plumbing Bureau of Buildings 248-4225
Sewer City Engineer 248-4165
Water Service Water Bureau 248-4447
Electrical Work Bureau of Buildings 248-4200
Heating Bureau of Buildings 248-4200
House Moving City Engineer 248-4165
Conditional Use Bureau of Planning 248-2425
Zone Change Bureau of Planning 248-2425
Downtown Plan Renew Bureau of Planning 248-2429
Public Solicitations Bureau of Licenses 248-4072
Parade Mayor's Office 248-4120
Signs Bureau of Buildings 248-4200
Park Bureau of Buildings 248-4230
SIDWALKS

Traffic

Obstructions

Emergency street obstructions, public stairs, street repair and improvements
City Engineer 248-4110

Carpool coordination and information
Carpool 227-7665

Bicycle Information

Auctions
Purchasing Division 248-4395

Path Routing
Bureau of Planning 248-4468

Registration
Local Police Precinct or Fire Station

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Downtown Plan Renew Bureau of Planning 248-2429
Public Solicitations Bureau of Licenses 248-4072
Parade Mayor's Office 248-4120
Signs Bureau of Buildings 248-4200
Park Bureau of Buildings 248-4230

NOTES
Trees/Tree Limbs

Information and advice
City Environmental Sanitation 248-4380

Terrace removal and trimming
Bureau of Parks 248-4380

Low hanging limbs
Bureau of Parks 248-4380

Limbs obstructing street sign or signal, vision at intersection
Bureau of Parks 248-4380

NOTE: There is no height limitation.
Problems of encroachment between private properties are civil matters

Environmental Commission

Counseling & Information

Senior Citizens
City Commissioners on Aging 248-3960

Veterans
City Project Return 234-0801

Youth Counseling, Information, and Referral
Human Resources Bureau 248-4474

Activities Information
Metropolitan Youth Commission 248-4005

Discrimination
Human Relations Commission 248-4187

Jobs

Placement
Civil Service Board 248-4352

Neighborhood Youth Corps
Park Bureau 248-3366

Summer Youth Programs
Human Resources Bureau 248-4280

Senior Citizens
City County Commission on Aging 248-3960

Discrimination
Human Relations Commission 248-4187

Sanitation
248-3400

In street area
City Engineer 248-4110

Sewerage backup
City Engineer 248-4110

Medical Clinic
City Medical Services 248-3816

Dezinfaction Center
Medical Services 248-3770

Venerable Disease Clinic
Medical Services 248-3414

Immunization Clinic
Medical Services 248-3409

Mental Health Clinic
Medical Services 248-3425

Food Handlers Certificate
Medical Services 248-3400

Traffic Problems

Enforcement of laws
Police Bureau 226-7551 Ext. 231

Traffic flow information, repair or addition of signals
Traffic Engineering 248-4295

Traffic signs
Traffic Engineering 288-5441

Speed limits on city streets
Traffic Engineering 248-4295

Obstruction of traffic by construction
Traffic Engineering 248-4295

Accident prevention
Traffic Safety Commission 248-4360

School crossing safety
Traffic Safety Commission 248-4360

PARKING

Abandoned autos legally parked, parked in lieu of garage
City Engineer 248-4100

Neighborhood Environment 248-4465

Parking of trucks in excess of 1/2 ton, blocking of streets or sidewalks
Emergency Clearing of obstructions
Police Bureau 226-7551 Ext. 231

Overtime, parked wrong way, etc. (non-emergency)
Traffic Engineering 248-4134

No Parking signs, time limit, parking requests, traffic loading zones
Traffic Engineering 248-4435

Parking in residential yard areas, illegal housing of vehicles
Bureau of Buildings 248-4230

Parking permits
Traffic Engineering 248-4295

Permits, paving, curbs
City Engineer 248-4173

Permit
City Engineer 248-4389

Vehicular obstructions
Police Bureau 226-7551 Ext. 265

Traffic control (signs, signals, speed limits)
Traffic Engineering 248-4295

Traffic problems
Traffic Engineering 248-4435

Vacations
City Engineer 248-4271

Lighting
Bureau of Lighting 248-4406

Sidestrip Improvement Program
City Engineer 248-4109

Obstructed drainage
City Engineer 248-4110

Low limits over, other non-emergency obstructions
Neighborhood Environment 248-4465

Bills, assessment notices
Auditor's Office 248-4090

(continued in next column)
Where to get maps

This article is continued from last month (Rain, Vol. 1, Issue 1).

THE COAST AND GEODETIC SURVEY has made triangulations on which all other maps are based, for much of the world; this data is of interest only to specialists. Their better-known activities include maps of all coastal areas, rather narrowly oriented to the needs of boatmen. The projection is always Mercator and the range of sizes and scales is chaotic. Don’t even think of buying this series unless most of your outdoor activity is on the water.

Now let’s move on to still another Federal agency in the wholesale mapping business: the Bureau of Land Management. Oregon contains an immense acreage of BLM land, both west-side and east-side.

The east side has as its subject of two available mappings. One is at the two-mile-per-inch scale and is divided on the basis of the Federal survey, in oblongs 30 miles deep by 36 miles wide (that’s six ranges of five townships). The series is beautifully printed in color, showing Federal land and range boundaries and other features. It is possible by absence of color-printing. Ownership is shown by a code letter in the corner of each tract: P for private, various other letters for the various public agencies. Contours are not shown, but each county is located by its central stream, rivulets and summits are shown, and all in all this is a wonderful buy if you can surmount the problem of large, unwieldy sheets. My own decision has been, to dissect each 30-minute quad into sixteenths (7½-minute quads) and mount these in a standard ring-binder. A lot of trouble, particularly as the useful 7½-minute corners are not shown but have to be developed by use of a meter-stick and lots of arithmetic. In return for my efforts I shall have a portable, accessible, not easily damageable mapping of thousands of interesting square miles. It is my idea that a good map, like a good dog, should accompany its owner into the field not once, but many, many times.

The BLM has free handout-maps for several recreational areas; the items go into and out of print, so I can only mention a sampling: Fisherman’s Bend, Steens Mountain, Siuslaw resource area, and so on. Since BLM and Forest Service timber is often interlaced most bewilderingly in Western Oregon, one wonders why the two agencies could not surmount the "paper curtain" which separates all Federal departments from one another, and turn out excellent maps in collaboration rather than two parallel and (on the whole) inadequate series. A start has been made; agencies have cooperated on an excellent free detailed map of the wild part of the Rogue River.

For Western Oregon in general, the BLM has a fairly good coverage of maps, one for each of their "regions." Unfortunately, three of the most important regions’ maps have been allowed to go out of print, but we are promised an early return. Scale is the stingy 2-miles-per-inch; price ranges between $1 and $2; detail, except in the Federal land itself (which in most versions is nicely colored), is poor from to wretched. One wonders if the new 30-minute mile-per-inch series is going to be extended to Western Oregon; my last inquiry received a noncommittal reply.

The BLM makes large-scale township maps (1000 feet per inch) of all townships in which it has holdings. These are fine for the Federal land itself; undependable outside it. Cost is $1 or $2 per sheet (large sheet, 31 x 31 inches plus margin). There are many other Federal agencies that produce maps: maps of census tracts, of post office routes, of dams and drainage basins, and so on and on. Unfortunately there are no good public maps of rural postal delivery routes; a private firm makes these.

We begin our story of mapping by state agencies with the Oregon Department of Geology and Mineral Industries. Often in collaboration with the Federal Geological Survey, they map areas of geologic interest. These are of concern only to the specialist, in the main. However, in the cases the base map is what historic, which is otherwise unobtainable, and sometimes the scale will be a non-standard (but useful) one. Their price list can be seen, and their library used, in the State Office Building in Portland.

The State Forestry Department, based in Salem, they’ve a headquarters just across from the pen there, and district headquarters at various spots such as Forest Grove. Like the BLM, they produce a close-up map of each township in which they own or manage any land; in the case of State Forestry I think these large close-ups are unavailable to the public. For public use they produce two-mile-per-inchers of which the best known is the one of Northwestern Oregon. Its coverage of the farming areas is poor, but when you get into the hill country where the state land is, you’ll find this map hard to beat. State land is shown by a green tint; Sells at $1.50 or so; you can pick it up at the Forest Grove headquarters. Don’t be without it if the northern Coast Range is your stamping-ground.

State Parks is a department within the Highway Division and is headquartered in the Highway Building, Salem. They produce a sketch map for each of the larger state parks.

State Highways has a large map department, in the basement of the Highway Building, and they produce several series available to the public at low prices. These mappings seem to be partially Federal Department of Transportation attempts to secure a degree of uniformity as between state and state. Such attempts are not entirely successful. The Washington series county road maps, for example, while theoretically half-inch-per-mile, are in actuality about 15/32 of an inch to the mile, and they cannot be matched with the corresponding Oregon series, also theoretically half-inch per mile, but in reality something like 13/32 of an inch to the mile.

The unit in these series is in each case the county, as one would surmise, except that the larger counties are dissected into two or more sheets. Harney county, for example, runs to 15 sheets. Because of this dissection, the series is not as inexpensive as at first would appear. Each county, or rather each sheet, costs around 50 cents. This applies to the medium or desk-top version, around half an inch to the mile. There’s also a wall version at a dollar, and an illegible notebook-sized version at 10 cents. Detail is surprisingly good, especially in the Oregon series. The Washington series I find somewhat more pedestrian, timid, and less artistic, but still a fairly good buy. I’m experimenting with a paste-up of most or all of these road maps, cutting them apart on standard latitude-longitude lines. This makes a more "widely" series and is a useful adjunct for the published Federal quadrangles (and a substitute where the latter are lacking).

The county series is edged out by a group of enlargements for the congested areas of each county, running to many pages for such counties as Multnomah and Marion. One views these enlargements with mixed feelings; obviously a lot of work went into them. I feel that, as maps, they are more or less failures, as their background of fuzzy air-photos obscures the road net and the lettering without adding very much information of a detailed kind.

The Highway Division’s city series, on the other hand, is a real gem of a mapping, consisting of clear, accurate drawings and lettering.

Don’t overlook the State Highway Department’s free highway map of the state. It is revised each spring and is on a par with the best gas-company state maps. In addition, it shows the exact boundaries of the several state forests.

When we turn from federal and state mapping to the efforts...
of the cities, counties, and special districts, our first impulse is to wonder why, with all this wealth of maps from the “higher echelons,” the lower levels need to do any mapping at all.

The facts seem to be, that the beautiful Federal and state maps, though known, used, and appreciated, often fail to come to grips with the day-by-day needs of the little people. The big drawback of the Federal mappings is the length of their revision cycle. Twenty years, and sometimes thirty or forty, elapse before a given map is updated. In times like these, such periods are simply too long for people responsible for police, fire, school, and other public services at the local level.

The state mappings have a shorter revision cycle (five years or nearly that), but each series lacks something the local authorities need. The State Highway county series, for example, lacks road names except on its enlargements of congested areas; and these, as we have remarked, are rendered almost illegible by the airphoto background. (Highways have made, for its own use, a map of each county showing road names, and these maps can be had by special order, but they still seem not to suit the locals; perhaps because they show only roads, nothing else. The ideal road map shows quite a bit of detail other than roads.)

The Columbia Region Associated Governments, CRAG for short, turns out a truly prodigious output of maps, mostly in connection with its long-range planning. Some are quite beautiful, printed in ten colors, and up to highest standards artistically, but useless, of course, in the here and now. For present-day use CRAG has developed a monstrous map in three yard-wide sheets each many yards long, designed to cover the entire metropolitan area. My first impression of this map was favorable. It was accurate and it was updated from week to week as news of changes came in. Lately, though, I have heard opinions of this map that disturb me. Apparently the street and road names were begun in too frail and spidery a style, and these fragile letters are beginning to erode from the original drawing. Illegibility is the cardinal sin in the world of maps, and CRAG seems to have committed it. I am sorry to see this expensive three-sheet map go down the drain, as the idea was good. Perhaps the drawing can be salvaged yet, with the street names replaced or heaved up.

Had the CRAG map been adequate, obviously the emergency services of eastern Washington county would not have had to finance a parallel mapping of their part of the CRAG area, this time with street names clear and legible.

Many cities and counties issue their own home-drawn maps, some of which are barely legible, others excellent. No library stocks them; one must make a pilgrimage from city hall to courthouse throughout your area of interest. Prices range from free to several dollars.

Private mapping continues to develop, in spite of the existence of so many public maps. Oil companies hire Rand and Gousha to turn out city maps on an assembly-line basis; some are quite good. The best, or at least most inclusive, map of the metro area is to be had from Mobil and Union stations. Others are also good but do not extend quite so far into the outskirts.

The rural property map is the specialty of Metsker of Tacoma. This firm maps each of the 75 northwestern counties in a cycle hovering around 15 years. All but the smallest lots are mapped with owner’s name.

The Tscheu Company, of Portland, turns out rural route maps. They can be had in county-atlas form, complete with a list of the rural taxpayers in the subject county.

—Bob Benson

**GEOLOGY**

The Geological Society of the Oregon Country
Attn: Secretary
P.O. Box 8579
Portland, Or. 97207

Lectures, field trips, earth science seminars, workshops. $10 membership (within 30 miles of Portland), $7 junior. $7 and $5 over 30 miles. Monthly newsletter.

**ENGINEERING**

Nomadic Furniture, 2
Pantheon Books, $4.95
Victor Papneck (Design for the Real World) and James Hennessy (with Papneck, Nomadic Furniture, 1).

Excellent how-to-build simple furniture.

Pelton Wheels
Alternative Power Systems
P.O. Box 124
Custer, Wash. 98240

We now have a small supply of cast steel Pelton type turbine wheels. Also complete units and units in all stages of construction, for people that want to use their water power now; also we would like to form an association of people to help people develop some hydroelectric systems at lowest cost possible.

see also Energy, Agriculture

**FUTURES**

Range: 5-20 year futures
Prime characteristics:
- Choice over alternative futures—choice is available over alternative opportunities the future offers, if awareness of alternatives exists in the present.
- Revolutionary change implementable in this time frame, from directed evolutionary (small) changes initiated today.
- Almost anything imaginable may be brought about in this time frame.
- The future available in this time frame is inevitable and shapable today.
- Today’s decisions can solidify this future time frame.

(Earl C. Joseph, The Futurist, August, 1974)

By 1985 we probably will be dependent upon imports for more than half of our supplies of 9 of 13 basic industrial raw materials, including iron ore, bauxite and tin.

(speech, Gov. McCall)

**GAMES**

see also Education
GOVERNMENT continued from page 15

Government in Oregon
Teacher's resource handbook on state and local government. Prepared by:
Oregon Board of Education
Public Instruction
942 Lancaster Drive NE
Salem, Ore. 97310

Legislative Action Center
601 W. Burnside
Portland, Or. 97209
223-7133
Sponsor legislation workshops, generally a clearinghouse for citizens' action.

Public Works Administration (1930's)
4.75 billion man-hours in constructing about 10% of the new transportation facilities in the United States. Also 35% of the hospitals, 65% of the city halls, facilities.

Portland City Government
Breakdown of city government, listing commissions, boards, committees. Diagram of city council responsibilities. Call 248-3511 for copies.

see also Associations, Energy

GRANTS

Oregon Humanities Program, 1973-74
1633 S.W. Park Ave.
Portland, Or. 97207

The projects described below are listed with the name of the nominal recipient of the regrant only, even though in several cases there is multiple sponsorship. Evaluative statements are distilled from personal observation, participants' reports, media coverage and responses from project personnel. They vary widely in breadth and depth and share the shortcomings common to all subjective judgments.

Group I
Lane Community College, "Asian-American Community Dialogue."

University of Oregon "Eugene-Springfield Community Resource Center."

Chemeketa Community College, "Aging: The Paradox of Growth and Loss."

Group II
University of Oregon Honors College, "A Community Dialogue—Baker, Oregon."

Wheeler County Historical Commission, "History of Wheeler County, Oregon."

Center for Urban Education, "Thorne Family Film."

Group III

Portland State University, "Coping with Crisis: Energy and the Human Environment."

Oregon State University, "Modern Times: An Exploration of Community."

Group IV
Black Education Center, "Inner-City Blacks: A Humanistic View of the Invisible Man in Urban Issues."


Northwest Multicultural Development Laboratory, "Oregon's Chicano: A Culture in Conflict."

PUBLICATIONS CONCERNING FINANCIAL SUPPORT

(Grant)

Annual Register of Grant Support, 1972 $39.50
Academic Media
52 Lincoln Ave.
Orange, New Jersey 07050

Catalog of Federal Education Assistance Programs HEW, 1972 3.25
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

Foundation News (bimonthly) P.O. Box 735
1 year, 10.00
Old Chelsea Station
New York, N.Y. 10011
2 years, 17.00
3 years, 23.00

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Summary of Federal Assistance Programs

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Portland, Or. 97209
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Chemeketa Community College, "Aging: The Paradox of Growth and Loss."

Group II
University of Oregon Honors College, "A Community Dialogue—Baker, Oregon."

Wheeler County Historical Commission, "History of Wheeler County, Oregon."

Center for Urban Education, "Thorne Family Film."

Group III

Portland State University, "Coping with Crisis: Energy and the Human Environment."

Oregon State University, "Modern Times: An Exploration of Community."

Group IV
Black Education Center, "Inner-City Blacks: A Humanistic View of the Invisible Man in Urban Issues."


Northwest Multicultural Development Laboratory, "Oregon's Chicano: A Culture in Conflict."

PUBLICATIONS CONCERNING FINANCIAL SUPPORT

(Grant)

Annual Register of Grant Support, 1972 $39.50
Academic Media
52 Lincoln Ave.
Orange, New Jersey 07050

Catalog of Federal Education Assistance Programs HEW, 1972 3.25
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

Foundation News (bimonthly) P.O. Box 735
1 year, 10.00
Old Chelsea Station
New York, N.Y. 10011
2 years, 17.00
3 years, 23.00

(1930's)
4.75 billion man-hours in constructing about 10% of the new transportation facilities in the United States. Also 35% of the hospitals, 65% of the city halls, facilities.

Public Works Administration (1930's)
4.75 billion man-hours in constructing about 10% of the new transportation facilities in the United States. Also 35% of the hospitals, 65% of the city halls, facilities.

Summary of Federal Assistance Programs

Legislative Action Center
601 W. Burnside
Portland, Or. 97209
223-7133
Sponsor legislation workshops, generally a clearinghouse for citizens' action.

Public Works Administration (1930's)
4.75 billion man-hours in constructing about 10% of the new transportation facilities in the United States. Also 35% of the hospitals, 65% of the city halls, facilities.

Portland City Government
Breakdown of city government, listing commissions, boards, committees. Diagram of city council responsibilities. Call 248-3511 for copies.

see also Associations, Energy

GRANTS

Oregon Humanities Program, 1973-74
1633 S.W. Park Ave.
Portland, Or. 97207

The projects described below are listed with the name of the nominal recipient of the regrant only, even though in several cases there is multiple sponsorship. Evaluative statements are distilled from personal observation, participants' reports, media coverage and responses from project personnel. They vary widely in breadth and depth and share the shortcomings common to all subjective judgments.

Group I
Lane Community College, "Asian-American Community Dialogue."

University of Oregon "Eugene-Springfield Community Resource Center."

Chemeketa Community College, "Aging: The Paradox of Growth and Loss."

Group II
University of Oregon Honors College, "A Community Dialogue—Baker, Oregon."

Wheeler County Historical Commission, "History of Wheeler County, Oregon."

Center for Urban Education, "Thorne Family Film."

Group III

Portland State University, "Coping with Crisis: Energy and the Human Environment."

Oregon State University, "Modern Times: An Exploration of Community."

Group IV
Black Education Center, "Inner-City Blacks: A Humanistic View of the Invisible Man in Urban Issues."


Northwest Multicultural Development Laboratory, "Oregon's Chicano: A Culture in Conflict."
November, 1974

Group V
Northwestern School of Law. “Neighborhood Law Conference.”
Creative Outlet. “Neighborhoods in Transition.”
Jackson County. “Jackson County as Community—Yesterday, Today, and Tomorrow.”

Group VI
Campus Christian Ministry. “Toward a New Community.”
Oregon State University. “Seataqua Classic Film Symposium.”
OMSI. “Cannon Beach: A Community Conversation.”

Group VII
Northwest Film Study Center. “Minorities of One.”
League of Women Voters, Eugene. “Dilemmas in Land Use.”

Group VIII
Jackson County Mental Health Association. “Neighborhood Dialogue Centers.”
Oregon College of Education. “Concepts of Death.”

Design, Development and Preparation of a Report on Natural Environment-Based Educational Activities and Environmental Education.
NSF Grant. John Lounsbury, Arizona State University, Tempe, Arizona 85281

The Multnomah Library in Portland subscribes to the Foundation Center Service; also they return information on Oregon foundations. 801 SW 10th. 223-7201. The EEC has some additional information on funding in environment and education areas.

see also Government, Information, Energy

GROUPS/ASSNS

Natural Resources Law Institute
10015 SW Terwilliger Blvd.
Portland, Or. 97219
(503) 244-6161, x 545
(see Rain, vol. 1, no. 1)

The Desert Trail Association
P.O. Box 589
Burns, Ore. 97720
Establishment of a border-to-border desert trail system.

Union of Young Environmentalists
2420 Nicolet Drive, E5107
Green Bay, Wis. 54302
Northwest contact: Doug Biggs
321 Ridgeway Gamma
Bellingham, Wash. 98225

Northwest Environmental Defense Center
10015 SW Terwilliger
Portland, Ore. 97219
Contact: Rick Fowlks, 244-6161, x 545

People’s Law School
Portland, Oregon
Three locations, offering classes throughout the winter, tenant, consumer, women and law, others. Call Judy Klagman, 224-4086 or Tim Flens, 234-8461, for schedule, etc.

Consumer Power League
3920 N.E. Highland St.
Portland, Ore.
281-1031
Group attempting to sponsor consumer ownership of Pacific Power and Light.

see also Outdoor Education

HISTORY

Eagle Bend, Self Portrait
Eagle Bend Public Schools,
District No. 790
Eagle Bend, Minn. 56446.
$1.00

Alfred Staehli
317 S.E. 62nd Ave.
Portland, Ore. 97215
235-3515
Studying historic preservation possibilities of neighborhoods under a project grant from the National Endowment for the Arts, City Options Program. The project seeks to identify and record evidence of historic personages, places and events associated with the growth and history of Portland. The project also seeks to identify and record distinctive neighborhood qualities which might be for preservation as part of Portland’s heritage.

Pacific N.W. Film and Research Society
301 SE 16th
Portland, Ore. 97214
(503) 233-9408
 Newly formed non-profit organization whose membership consists of persons interested in the preservation of the sights and sounds of historic sites with film, videotape, a audio tape. Will work with other societies with common purposes. Stuart Heathorne, coordinator. Membership: Adult $10, Student $5, Family $22.50.

(J.E.)

see also Architecture, Agriculture, Art

IDEAS

“Do you know what the country needs today? A seven-cent nickel...”
If it works out, next year we could have an eight-cent nickel. ... You could go to the newstand, buy a three-cent newspaper, and get the nickel back again. One nickel carefully used would last a lifetime.”
—Groucho Marx in Animal Crackers, 1930.

continued on page 18
Public Interest Reports
Environmental Alert Group
543 N. Martel Ave.
Los Angeles, Cal. 90046
Good fact sheets/pamphlets available at cost. Write for publication list.

World Environmental Directory
Standard Environmental Reference
P.O. Box 1067
Silver Spring, Md. 20910
$50
6,600 companies, groups, etc., in 60 countries. They also publish other library-level subscription environmental journals, such as Energy, Resources Report. 1 yr, $145.

Hatfield Newsletter
U.S. Senate
September, 4 pages on privacy legislation.

Metric Conversion Chart—Approximations

<table>
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<tr>
<th>Sym-</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
<th>Sym-</th>
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<td>(on)</td>
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<tr>
<td>square meters</td>
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<td>ounces</td>
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<td>kg</td>
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<td>tonnes (1000kg)</td>
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<td>VOLUME</td>
<td>milliliters</td>
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<td>cubic meters</td>
<td>cubic feet</td>
<td>ft³</td>
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<td>cubic yards</td>
<td>yd³</td>
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<td>°F Fahrenheit temp.</td>
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<td>°C Celsius temp.</td>
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Publications and Reports Resulting from Research Grants. Funded through:
Coastal Pollution Branch
Pacific Northwest Environmental Research Laboratory
U.S. Environmental Protection Agency
200 S.W. 35th St.
Corvallis, Or. 97330

U.S. Environmental Protection Agency
Region X
1200 6th Ave.
Seattle, Wash. 98101
(206) 442-1200
An after-hours environmental emergency services notification project. For reporting oil spills, unexplained fish kills, sewage treatment disasters, etc.

Environmental Impact Statement Reviews
U.S. Environmental Protection Agency
1200 6th Ave.
Seattle, Wash. 98101
Periodically the EPA publishes a list of received impact statements for the Northwest region.

Forestry Extension
School of Forestry
Oregon State University
Corvallis, Or. 97331
Free catalog of conferences, publications, audio-visual materials. A range of How-to, technical and various ages education curriculum materials.

Resource Guide—Use This
Western Regional Environmental Ed. Council
721 Capitol Mall
Sacramento, Cal. 95814
Guide to environmental education curriculum.

Speakers and Programs
Multnomah County Library
801 S.W. 10th Ave.
Group Services
223-7201, x43
A free 25 page booklet on organizations offering speakers programs in the Portland area.

To Live with the Earth
Oregon Environmental Foundation
c/o Oregon Environmental Council
2637 SW Water Ave.
Portland, Ore. 97201
122-1963
$1.25 postpaid. 78 pp. Idea and information booklet, including directory and bibliography for Oregonians mostly.

Multnomah County Library
801 SW 10th Ave.
Portland, Ore. 97205
Picture file collection, formed in 1915 by Elanor Statler. 10,000 categories. 2-3 million sheets.

SIPAU
c/o Noel Peattie
Rt. 1, Box 216
Winters, Cal. 95694
$2/yr. A librarian review/abstract-style newsletter, semi-annually. Finds little-known newsletters, "underground" publications, etc.

The EEC has been given the results of a January, 1974, search of the files of the Institute for Environmental Scientists in Wash., Ore., Idaho, Montana, British Columbia, Alberta, interested in assisting conservation groups. Call EEC (229-4682) for more information.

Some other Environmental Education Newsletters:
The Ecology Center Newsletter
2179 Allston Way
Berkeley, Cal. 94704
Newsletter of Educational Faculty of Education
University of British Columbia
Vancouver 8, B.C., Canada
228-6895
Eco-Notes
Western Regional Environmental Ed. Council
721 Capitol Mall
Sacramento, Calif. 95814
State and Local Environmental Libraries: A Directory
Natl. Technical Institute of Science
5280 Port Royal Rd.
Springfield, Va. 22105
$3.00

see also Eco-Net
Percentage of All Farm Numbers and Sales by Non-Family Farms by Region, State and Type of Production 1964

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<th>Region</th>
<th>% of Farms</th>
<th>% of Sales</th>
<th>State</th>
<th>% of Sales</th>
<th>Type of Production</th>
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<th>% of Sales</th>
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<td>S. Eastern</td>
<td>6</td>
<td>56</td>
<td>California</td>
<td>79</td>
<td>Fruit &amp; nuts</td>
<td>17</td>
<td>71</td>
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<tr>
<td>Mountain</td>
<td>9</td>
<td>54</td>
<td>N. Mexico</td>
<td>63</td>
<td>Other field crops</td>
<td>20</td>
<td>70</td>
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<tr>
<td>Delta</td>
<td>8</td>
<td>51</td>
<td>Colorado</td>
<td>57</td>
<td>Cotton</td>
<td>10</td>
<td>58</td>
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<tr>
<td>N. England</td>
<td>11</td>
<td>49</td>
<td>Mississippi</td>
<td>55</td>
<td>Poultry</td>
<td>8</td>
<td>43</td>
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<tr>
<td>S. Plains</td>
<td>6</td>
<td>45</td>
<td>Maine</td>
<td>53</td>
<td>Other livestock</td>
<td>3</td>
<td>31</td>
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<tr>
<td>Lake States</td>
<td>2</td>
<td>14</td>
<td>Texas</td>
<td>52</td>
<td>General</td>
<td>5</td>
<td>30</td>
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<td>Arkansas</td>
<td>50</td>
<td>Dairy</td>
<td>6</td>
<td>23</td>
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<tr>
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<td>Louisiana</td>
<td>48</td>
<td>Tobacco</td>
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<td>Appalachia</td>
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<td>Wash.-Ore.</td>
<td>46</td>
<td>Cash grain</td>
<td>3</td>
<td>15</td>
</tr>
</tbody>
</table>


**MEDIA**

We are doing the layout on the second video exchange directory for the Seattle area... and it will be out in November. We also are working with a lot of folks and cable companies in order to help people understand the hardware/software reel to real time process.

—Roeby Simms
North Community Television Project
Box 5463
Seattle, Wash. 98105

**NETWORKS**

**Willamette Week**
Weekly newspaper soon to be published. Ron Buel, publisher.
320 S.W. Stark, Rm. 315
Portland, Ore. 97204
243-2122; 243-2128
Paper somewhat modeled after *National Observer, Oregon Times*, or *Christian Science Monitor*. First issue is to be published around Nov. 12. $8/yr.

**OPEN, NW Information Network**
Address correction:
P.O. Box 692
Port Townsend, Wash. 98368
or
P.O. Box 5599
Seattle, Wash. 98105

**Other NW Information Networks:**
Jaybird Information,
Box 554, Republic Wash.
Co-op Contacts,
Box 19142, Portland, Or. 97209
Rational Circle,
c/o 2256-13 Patterson, Eugene, Ore. 97405
Rural Resources and Information
P.O. Box 874, Toppenish, Wash. 98948
Vancouver Learning Exchange,
2455 W. 5th, Vancouver 9, B.C., Canada
(Edward Goehring, OPEN)

**The Avocado Exchange at the University of Washington Experimental College was discontinued. The Avocado people are now starting a network called "Visions Exchange."**

(Edward Goehring, OPEN)

**Reflections from the Road**
About three weeks ago Dana Atchley presented an audio image tour of his last year's rambling through America. Attended by 250 people in the Earth Tavern's new public space. Picking things up, leaving them off, a carrier pigeon with a camera and tape recorder.

**Willamette Valley Observer**
454 Willamette St.
Eugene, Ore. 97401
New community non-profit weekly newspaper, to be published soon.

**Skills Service Directory**
Harpers Magazine, 504
2 Park Ave.
New York, N.Y. 10016

**Western Union**
Messages by Satellite. Phone 800-325-6400 for free booklet, "Information Networks."
KEY CONCEPTS—Sample study areas

<table>
<thead>
<tr>
<th>Ecosystems</th>
<th>PRIMARY INVOLVEMENT OF SUBJECT AREAS</th>
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<td>ENERGY</td>
<td>Earth Science, Agronomy, Geology, Industrial Arts, Business/Econ, Anthropology, Psychology, Social Studies, History, Creative Arts</td>
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<td>Earth Science, Agronomy, Geology, Industrial Arts, Business/Econ, Anthropology, Psychology, Social Studies, History, Creative Arts</td>
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<td>POPULATION</td>
<td>Earth Science, Agronomy, Geology, Industrial Arts, Business/Econ, Anthropology, Psychology, Social Studies, History, Creative Arts</td>
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<td>COMMUNITY</td>
<td>Earth Science, Agronomy, Geology, Industrial Arts, Business/Econ, Anthropology, Psychology, Social Studies, History, Creative Arts</td>
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<tr>
<td>INTERACTION</td>
<td>Earth Science, Agronomy, Geology, Industrial Arts, Business/Econ, Anthropology, Psychology, Social Studies, History, Creative Arts</td>
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<tr>
<td>BALANCE</td>
<td>Earth Science, Agronomy, Geology, Industrial Arts, Business/Econ, Anthropology, Psychology, Social Studies, History, Creative Arts</td>
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<table>
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<th>Human Systems</th>
<th>PRIMARY INVOLVEMENT OF SUBJECT AREAS</th>
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OUTDOOR ED

Metro Environmental Education Council,
Portland Area:
Chairman: John Gumert, Bureau of Land Management, 234-3361, x 4024
Vice-chairman: Bob Man, Washington County I.D., 648-7191
Secretary: Yvonne Weber, Western Forestry Center, 228-1367

1974 Operation Nature Guide
50¢ from Nature Guide, 34915 4th Ave. S.
Federal Way, Wash. 98002
List of 600 persons, compiled by the Audubon Society, willing to be listed as willing and eager to give visitors a couple of hours of time. Wildflowers, geology, mammals, etc.

PARTICIPATION

"Thousands of groups exist, among them now are at least 3,000 conservation and environmental organizations. This number includes approximately 250 national and regional groups and 400 state organizations."

Resources for Citizen Planners
Sumner Sharpe, Rick Paulson. Published by Center for Urban Education. How-to material, people in community, etc. Copies from C.U.E. in Portland, 224-1144.

(RECREATION)

see also Education

(M.L.)
Voluntary citizen organizations have long been a part of the way of life in the United States. Individuals with common interests—social, civic, cultural, political, religious, professional business—have come together in clubs, societies, associations, and groups to share these common interests, exchange experiences, and pursue mutual goals.

EPA Office of Public Affairs
Washington, D.C. 20460

Results: Modernistic Tropical Fish Aquarium ... and Sports Fan Rain Hood

There were Hoover blankets, old newspapers used for warmth by Park Bench tenants; Hoover flags were empty pocket linings turned inside out. In the country there were Hoover hogs, the jack rabbits that impoverished farmers caught for food; and Hoover wagons. Broken down cars restored to locomotion with the help of mules.

New Sportsman Inn,
15 NW 6th
Portland, Ore.,
mentioned in last issue, is closed.

Arthur W. Erickson
Eclectic Arts
630 SW 12th
Portland, Ore. 97205
(503) 227-4710
Exhibits and events. Nice atmosphere. Recently shown there: traditional arts of Tibetan culture, and Kris Krohn's Xerox works.

“Something ‘homespun,’ something new, something green, honey-colored, too—that’s today’s most visible trend in interiors.”

(See p. 12 & 19)

Space

Portland Center for the Visual Arts
117 NW 5th
Portland, Ore. 97209
222-7107
Exciting exhibit gallery that often includes use of total space, involvement art, and events.

Continued on page 22
Energy Use for Bicycling
Oak Ridge Ntl. Laboratory
Environmental Program
P.O. Box X
Oak Ridge, Tenn. 37830
"If 10% of the urban auto travel conducted during daylight and in good weather for trips of 5 miles or less were shifted to bicycles, the savings in 1971 would have been 180 trillion BTU, 1.8% of total urban automobile energy use." Report No. ORNL-NSF-EP-65.

Tri-Met
Beginning January 12, 1975, Tri-Met will institute a free ride zone, for downtown Portland and eliminate the zone system, so that all journeys will be 35¢ outside of downtown.

TABLE 1.
ROOF AREA NEEDED
TO CATCH 25 GALLONS
PER DAY AT VARIOUS RAINFALLS

<table>
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<th>Rainfall, inches per year</th>
<th>Square feet of roof needed</th>
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<td>5</td>
<td>3,000</td>
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<tr>
<td>10</td>
<td>1,500</td>
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<td>15</td>
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(25 gallons per day is sufficient for one person.)
At temperatures around 50 degrees, a naked man's limbs begin to stiffen. At zero, he will freeze to death within a few minutes. With the help of clothing and food and the body's adaptive mechanisms, though, most of us should get along fine this winter.

Like all other warm-blooded animals, man takes along his own internal climate wherever he goes. Under normal circumstances, this carefully maintained microclimate rarely varies more than a few degrees (from 97 to 100 degrees) at the tropics or at the poles. When the body is confronted with sudden cold, nearly all perspiration stops, inhibiting the cooling effects of evaporation, and the blood vessels near the surface of the body constrict, slowing the flow of heat from deep inside the body to the surface. (This is why our hands and feet get chilled in cold weather.)

When external temperatures drop still further, our bodies call on two other heat-creating internal defenses: shivering, and a squirt of the hormone epinephrine.

Dr. Reid Bryson, U. of Wisconsin climatologist, is reminding folks that 1975 will be the midpoint of the 22-year draught cycle which brought us the dust bowl ghost, is reminding folks that 1975 will

Positional-Situations

Wanted: Oregon Environmental Position

Wanted: Pacific NW Env. Education Position. Dr. Tom Abeler, College of Env. Science, Univ. of Wisconsin, Green Bay, Wis., 54302.
Ph.D., Univ. of Louisville (chemistry). Asst. Prof., College of Env. Science. Teaching, research, writing exp.

Rutan's Research Station
I am presently building a Quonset building of which one section will house 500 chickens, the waste from which will be washed down daily into a digester—which will be open for public viewing at an admission price—which will in turn feed a greenhouse with heat and nourishment from the slurry. The greenhouse section will have panels that close at night to conserve heat. The Quonset hut shape makes this easily engineered. The digester end of the project will be open for viewing beginning the week of 20 Oct., 1974.

Al Rutan
983 Riverside Drive
Billings, Mont. 59101

Have information about current minicomputers and peripherals,... and design for a community or network text-information processor. Looking for software/hardware design collective, with funding, in the Puget Sound area.

—Bob Wallace
New World Computer Services, Inc.
P.O. Box 5415
Seattle, Wash. 98105

Living in the Ozarks Newsletter... is a regional newsletter for people in and interested in the Ozarks. Subscriptions $5 for 12 monthly issues. Joel and Sherri Davidson, Pettigrew, Ark. 72752.

The Energy Information Center, Washington state, is looking for information/analysis of energy efficiency, particularly with regard to the construction industry. (206) 753-5420.

Soil Association
Roy Thompson, Star Route, Box 148, Naches, Wash. 98937.
Forming a NW branch of this long-existing organic gardening and intermediate technology association.
CALENDAR


Nov. 6—Town Meeting for SW Portland Residents on the 1974 Housing and Community Development Act. 7:30 p.m. Red Cross Bldg., 4200 SW Corbett.

Nov. 6—Eco-Aesthetics Forum No. 3 Government’s role in city options, and urban planning. Portland. Cleveland High School. Call Roberta Caughlan, 234-9020, for more information.

Nov. 7-8—Western Environmental Trade Association Annual Meeting. Inn at the Quay, Vancouver, Wash.

Nov. 8-10—Schools within Schools Conference, Chicago. Contact Lynda Falkenstein, 5323 SE 47th, Portland, Ore. 97206.

Nov. 9-10—Oregon Environmental Foundation Country Boutique Crafts Fair. Call Anne Hunt for details, 287-3495.


Nov. 11—Gary Snyder, Reading Poetry 7:30 p.m., Smith Memorial Ballroom, Portland State University.

Nov. 12—Oregon Volunteer Lawyers for the Arts Meeting. Call Leonard Duboff, 244-1181, for details.

Nov. 13-15—The State Environmental Education Conference, Camp Menucha Call 229-4682 for details.

November 16—Oregon Architectural Barriers Council Workshop. 10-4 p.m. Mt Hood Community College.

Nov. 20—Eco-Aesthetics, Forum No. 4. Energy—What Options, and Realities of Life and How to Deal with Them. Call Roberta Coughlin, Cleveland High School, 234-9020 for more information.

Nov. 21—Benefit for Creative Outlet 5:30 p.m. at Calvin’s Public House, 1116 S.W. Washington. $2 for beer, music, munchies. Portland, 233-3654.

Nov. 27-Dec. 2—Transforming Our Consciousness. Biocergetics. Contact Dan Barr, Biocergetics NW, 3938 1st Ave NE, Seattle, Wn. 98105.

Dec. 1—Lewis Cook Presents, at the NW Film Study Center, more historic film, much of which hasn’t been seen for 50 years.

Dec. 7, 10-4 p.m.—Hands-on Video Workshop, Creative Outlet. 201 S.E. 12th, Portland. Call to confirm, 233-3654.