10-1-1974

Rain Monthly Newsletter of ECO NET

ECO-NET

Let us know how access to this document benefits you.
Follow this and additional works at: http://pdxscholar.library.pdx.edu/rain_japt

Recommended Citation
http://pdxscholar.library.pdx.edu/rain_japt/3

This Book is brought to you for free and open access. It has been accepted for inclusion in RAIN: Journal of Appropriate Technologies by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.
RAIN is a monthly bulletin board. As stuff comes our way by phone, mail, feet, hands and mouth we make entries, abstracts, paragraphs. We emphasize environmental/energy related and communications kinds of information; and we are interested in the evolutionary possibilities of inter-disciplinary connections.

Our geographic emphasis is the Pacific Northwest, though our prejudice will be Oregon, and more specifically Portland. You can correct our bias by your feedback, sending us information on projects, exciting books, pieces, newsletters, ideas, photos, corrections. (see also reader inquiry card).

Positions and Situations (see this page) is a place for you locate others, more or less without our editorial intervention. If you are thinking about thinking about doing something here's the place to find next steps and connections.

We have spent nearly as much time constructing our mailing list, as compiling the newsletter. It is presently composed of environmental educators, people doing energy related research, other newsletters, other centers, community organizers, governmental and private environmentally related groups and agencies.

If you have other persons you think should receive RAIN drop us a note.

Why you may not be entered: We don't know about you, you are lost in brown boxes and manila envelopes, or we ran out of time and space.

You will notice initials following some entries: the person submitting the entry is found in the list of contributors.

In addition to RAIN, during the year we expect to publish: 1) City Survival, a short directory (or series) to information resources in Portland, 2) A Directory of Environmental Information Resources in the Pacific Northwest, 3) How To Sheets, guides to getting things done, like how to find your way through governmental bureaucracies, 4) An Access Guide, to materials at EEC/Energy Center.

Please mention RAIN when asking for information from individuals and groups; as it then encourages those people to keep us posted. (S.J.)

---

### Reader Inquiry Card

**NAME:**

**ADDRESS:**

**PHONE:**

**OCCUPATION:**

I would like information especially in the areas of:

I would like to submit information regularly, please contact.

**SPECIAL FEATURES:**

which of the following would you like to see done:

1) Environmental directory 7) Guide to media
2) Impact statement info. guide 8) Interviews
3) How to sheets 9) Guide to Newsletters
4) More events 10) Guide to video resources
6) Guide to places 12) Guide to N.W. fiction
CO EVOLUTION QUARTERLY.
558 Santa Cruz, Menlo Park, Ca.
94055, $6/yr.
From some of the people who
did the Whole Earth Catalog.
Emphasis more on energy, food,
survival, political action. An
exhaustive article on Agriculture
by Anne and Paul Ehrlich.

| TABLE IV
| Protein Equivalent of Combinations to Steak |
| Combination in best proportions | Steak protein equivalent |
| 2 cups rice + ¼ cup peas or beans | 9.0 oz. |
| 2½ cups rice + ¼ cup soybeans | 9.25 oz. |
| 1½ cups rice + 2 cups skim milk | 7.75 oz. |
| 2 cups rice + ⅔ oz. cheese | 7.75 oz. |
| 4 slices whole wheat bread + 1 oz. cheese | 2.5 oz. |
| 1 cup whole wheat flour + 2 tbs nonfat dry milk | 3 oz. |
| 1½ cups whole wheat flour + ¼ cup beans | 4.6 oz. |
| 1 cup whole wheat flour + ¼ cup soy flour | 4.1 oz. |
| 6-7 cornmeal tortillas + ¼ cup beans | 2.6 oz. |
| ½ cup nonfat dry milk + 1 cup beans | 8.33 oz. |
| 1/3 cup peanut butter + ⅔ cup skim milk + 6 slices whole wheat bread | 10.1 oz. |

Source: Lappe'

Proceedings: Bioconversion Energy
Research Conference
Institute for Man & His Environment
University of Massachusetts
Amherst, Massachusetts 01002
Methane fermentation, soiled waste recovery, anaerobic digestion, fuel gas from solid waste. Technical

"Life Support Requirements for Space Missions"
Charles M. Proctor, Journal of the Sanitary Engineering Division, proceedings of the American Society of Civil Engineers, April, 1965

CONSUMER'S FOOD COUNCIL
6844 SW 62nd Pl. Portland, Or.
As well as consumer legislation they have published handbooks on pressure cooking, soap making, etc...

The 10 countries with highest per acre yield of agricultural products are:
Taiwan, U.A.R., Netherlands, Belgium, Japan, Denmark, West Germany, Republic of Korea, Ceylon, Norway.
NORTHWEST CONFERENCE FOR ALTERNATIVE AGRICULTURE. Nov. 21-23, 1974.
Being engineered by Becky and Woody Deryckx, and friends. Popular Hills, Rt. 1, Box 64, Palouse, Wn. 99161. (509) 878-4503.
For people involved in Agriculture, both rural and urban. Land reform, alternative energy, marketing, economics.

INTERNATIONAL INDEPENDENCE INSTITUTE
West Road Box 183
Ashby, Massachusetts 01431
Probably the central source of information about land trusts. A very old network with roots in the thirties "acre and independence" movement, and Henry George (Progress and Poverty);

Microfarms - A Proposal for Development
A proposal and explanation of urban microfarms, similar in some ways to J. B. DeKorne's "Ecosystem".
The problems of human survival can only be solved by changes in the values, life style and environmental consciousness on the part of large sections of the population. Since the middle class urban/suburban portion of the society is most instrumental in setting and maintaining value systems and policies in this country this plan is directed primarily toward them.

Energy Use for Food in the United States
Eric Hurst. Oak Ridge Mt. Lab. ORNL - NSF - EP - 57
Oct. 73. 32 PP
The loaf of bread you bought today costs as much in energy as you would consume if you were to drive your car 40 or 50 miles.

Water Recycling
by Rafael Montanaro, Laboratory for Maximum Potential Systems, School of Architecture, Univ. of Texas, Austin, TX 78712 $5.00
Residential water use options incl. low water, grey water toilets, reducing use with spray showers, foot pedal-actuated faucets, etc. (1)

An Algal Regenerative System For Single-Family Farms and Villages
C. G. Coluuke & W. J. Oswald
Research on the utilization of algae for the reclamation of nutrients and water from agricultural waste waters, and on the development of photo-synthetic life-support systems.
Progress report available from Sanitary Engineering Research Laboratory U. of California Richmond Field Station 1301 S 46th St. Richmond, Ca. 94804 $2.00 (Check to: Regents of the University of California)

OREGON HERB SOCIETY
6825 SW Capitol Highway
Portland, Or. 97219

FIRST ANNUAL NE WASHINGTON HARVEST FESTIVAL AND BARTER DAYS.
Was held Sept. 28 & 29, 1974; to give people a chance to sell or barter their excess of food they have grown or gathered.
And watch these pages for more on bartering in upcoming issues.
The fossil fuel energy consumed by tractors in the United States is about equal to the total energy yield for US agriculture.
THE AUTONOMOUS HOUSE
30 academic studies on the self-powered, self-sufficient home are available from Mr. J. B. Thring, Technical Research Division, Dept. of Architecture, University of Cambridge, 1 Scroope Terrace, Cambridge, England CB2 1PX. Ask for their publication list. (lj)

ART
ART OF THE PACIFIC NORTHWEST; from the 1930's to the Present.

ON SITE, a sculpture in the Environment Magazine.
60 Greene St.
New York, NY 10012
September issue on energy.

AUDIO VISUAL
N. W. Film Studies Center
Portland Art Museum
SW Park and Madison
Portland, Or. 97205 226-2811
Classes this fall:
4. "Workshops in Television Production". As well as TV production, video as art form, aural and image feedback, colorization, image manipulation and studio practices. Oct. 7-Dec. 9.

IMAGES, a newsletter for the people of Coos-County, Oregon. Coos County TV, PO Box 641, Bandon, Or. 97411.
Coos County TV is five people working on developing community education and information materials on land use planning. Producers of "Coos County; The Future is Now"; "Hands On" (citizen planning); and "People and the Land". Funded by federal Title I money, administered by State of Oregon Educational Coordinating Council.

We have heard from Thomas M. Doggett, Director of Programming and Production, OEPBS, that KOAC Radio TV is in the process of developing a short series of programs with the OSU Federal Cooperative Extension Service regarding construction of homes for most efficient energy usage. These will probably not air before the first of the year.

CREATIVE OUTLET
201 SE 12th
Portland, Or. 97214 233-3654
Currently the Outlet's focus is the Neighborhoods in Transition project (see History), the development of an "electronics bench"--to include tools and information for editing video tapes, a monthly hands on video workshop (see calendar), communication consultation for low income persons, non profit groups, and dark room, still photography work. (see also "GROW" under education).

Rural New Towns: Toward a National Policy. Shimon Gottschalk
Center for Community Economic Development
Cambridge, Massachusetts 02140
22pp. 1971
Proposes a policy for rural new towns for America as an alternative to migration for rural poor families.

OFFICE OF NEIGHBORHOOD ASSOCIATIONS
405 City Hall 248-4519
Portland, Or. 97204
Mary Pederson, director, has written a paper called "Neighborhood Organization in Portland", available on request. Also published in Portland Scribe. 215 SE 9th. Portland, Or. 97214.

Population, entire issue. Migration, history, food, transfer of technology. $1.25. (B. P.)

Human Settlements Symposium (Sept. 11-13) offered alternative approaches to understanding human settlements, information on current alternative human settlements to our large cities, and the opportunity for Spokanites to brainstorm on the future of their human settlement.

see also Agriculture, Food, History

COMPUTERS
People's Computer Company
PO BOX 310
Menlo Park, CA 94025
Newspaper $4.00 for 5 issues (school year). Games, research, art, computer films, computer poetry. Both by resident People's Computer people, and elsewhere.

Computers continued page 8
E C O  N E T  R E P O R T S

E C C

A lot has happened in the last several months. The Environmental Education Center has been presented with both new resources and opportunities. These events have suggested the necessity for a reorganization of both our people and our thinking about the "big picture" of environmental education in the tri-county area, the Pacific Northwest and the nation.

PEOPLE

Director of four funded projects for FY 74-75 is Don Stotler.

Environmental Education Center (Environmental Ed. Act) PSU fiscal agent, Laura Williamson, manager.

National Demonstration Center at PSU (Environmental ed. Act), PSU fiscal agent, Laura Williamson, manager.

Energy Center (Environmental E. Act) OMSI fiscal agent, Dean Ivy, manager.

Environmental Communications Network (2nd of 3 yrs.) Hill family foundation. OMSI fiscal agent. Dean Ivy, manager.

E C O  N E T

Because we feel that all four of these projects constitute a common thrust toward an environmentally concerned, literate, active, and aware future society, we are calling this common thrust Eco-net.

PRIORITY OF CONCERN

Although each one of the above projects has specific objectives all projects share general goals and areas of priority concern and action. These areas of common concern are:

Centers---remodelling and new rooms
Action toward Bl-Centennial
Three new employees (Randi Krogstad, Anita Helle, Steve Johnson)
Energy Center (OMSI)--now underway
Spokane Center--U.S Pavilion retained after EXPO?
Cleveland High School--Eco-Aesthetics Center?
Hillsboro Public Schools--community center?

Information Exchange
Bend In The River and Syncn conferences
NW Video Network
SHARE--computerized Eco-exchange
RAIN--new eco-net newsletter
Slide show with audio tape on centers

Data Gathering by Students
Noise and water quality proposal

B o i s e  E C O  N E T  M e e t i n g

15 people from 15 Northwest region environmental education groups and projects met to suggest information sharing methods and ideas which would enhance individual projects. Initial focus areas included--media access information, access to computer services and assistance; access to technical and legal environmental information on a crisis basis. Lots of other topics were touched on. The group asks you to brainstorm on your own and with co-workers and friends on information needs, information sharing projects, techniques and the NW environment. For regional Eco-net brainstorm group minutes, for more information, contact Dean Ivy, OMSI, 4015 SW Canyon rd. Portland, Or. 97221. 224-9500.

E C O  N E T  V i d e o

One of the components of the ECO NET project is a video access facility where you can learn to use portable, 1/2" television equipment. The video staff, Bob Phillips and Charles Auch, are located at OMSI and can be reached by phoning 224-9500.

The video equipment, three portable camera/recorders and an editing system, serves as a means for anyone to document environmental ideas and problems. Tapes in the Environmental NET files can be seen at the EEC or OMSI. In addition, Bob and Charles are cataloging tapes produced elsewhere in the Northwest with the assistance of Jack Eyerly (of Experiments in Art and Technology) and Carole Smith.

The catalog process involves a printed format for information about individual tapes, along with the conditions for access and the names/addresses of producers.

If you have tapes and would like to have them included in the catalog, write to ECO NET Video, 7 OMSI, 4015 SW Canyon Rd., Portland, Or. 97221. The catalog format should be returned to OMSI, where they will be reproduced. The catalog will consist of the combined entries of all contributors and will be distributed to everyone who participates in it. Additional copies will be available through access points throughout the Northwest, or by writing ECO NET Video and including a check to cover whatever costs of reproduction we have.

Examples of video projects during the summer include equipment assistance to the Creative Outlet's project, "Neighborhoods in Transition", which is compiling images/history of Portland's Buckman neighborhood. The Buckman neighborhood is in the urban core of Portland and has many of the problems of crime, absentee landlords, industrial encroachment, and transient populations associated with that location. Tapes from this project can be seen at the Creative Outlet, 201 SE 12th, phone 233-3634; talk with the Director, Ed Lyle, for further details.

Tom Taylor, of PSU's Center for the Moving Image, has worked on his project, "Cannon Beach, a Community Conversation", spending most of his time with the people of Cannon Beach, sharing the ideas that individuals have of their town. Tom comes back to OMSI to edit and condense these statements. He then returns and plays the edited tape for each of the participants. The conversations Tom has with his neighbors are part of a feedback process: everyone has the right to delete or change their statements. After the edited tape is shown to individuals, Tom plays it for the community at large. These edited tapes then provide the impetus for further discussions. (See also Audio-Visual)

E n e r g y  C e n t e r

My main task so far has been creating an Energy Information File. This has turned out to be a much more involved undertaking than I think anybody had originally thought it would be. Especially since the information is nationwide and with Canada and some foreign resources included. Thus far, I have gleaned information from several lists and sources, i.e. directories, guides, etc., to compile a random list. From
OCTOBER, 1974

this list, I have done one bulk mailing which was in the form of a cover letter and a very short form asking for names of individuals, affiliations, and contact persons in said affiliations. The response to this mailing which was about 200 plus has been excellent. So far I have received 75 responses in 2 weeks. Out of this I will compile a list of names to which the Energy Questionnaire will be sent. This is a more detailed form and will give me the exact information I need for the Rolodex Card File. The Rolodex Card File will eventually be placed in the Energy Center in an information exhibit.

If you would like more information on the Energy Information File, or would like to receive the Alternative Energy Information Sheets and the Solar Energy Collection Abstract, Wind-Powered Electricity Generation Abstract, Methane Gas Generation Abstract, etc. please call Marcia Lynch, 224-9500 x 72. (Marcia Lynch)

Lee Johnson has begun to receive commercially-manufactured solar collector panels for display in the Oregon Museum of Science & Industry Exhibit Wing designed by Architect Explorer Post sponsored by Skidmore, Owings & Merrill. So far, Olin Corp., Transco and Fauro have accepted the invitation to participate in the exhibit, which will be seen by OMSI's 1 million annual visitors. PPG Industries, Reynolds Metals, Energet, AAI, Intertechnology, Sunworks, Solar Systems, Mirrinite-Daylin Corp., and Beasley of Australia have not yet responded. A Spring 1975 conference of Oregon architects, developers and building systems engineers is contemplated as an opening for the Solar Energy Exhibit. (L.J.)

Lee's testimony "Wind and Nuclear Fission Electricity: A Cost-Benefit Comparison" was well received by Mr. Jack Robertson, Region X Federal Energy Administration coordinator and the other panel members, as was his description of the OMSI Energy Center as classes, workshops, conferences and an information center with displays. Copies of the statement are available for $1 from Marcia Lynch, OMSI Energy Center. (L.J.)

Graham Hubenthal and Lee Johnson visited Tom Bender and Laura deWond in Salem on their way back from returning the U of O microfilm machine. Nancy Carpenter and Sam Sadler are now beginning "mini'studies" using net energy to look at the things Oregonians are now doing or likely to do as we move toward recession, greater labor use, in a net energy declining society.

Laura is working on a LIVING LIGHTLY IN OREGON catalog, a cross between the Whole Earth Catalog and Chinook Centrex with the emphasis on what Oregonians can do and what the net energy concepts suggest about what they should do. Tom recommended that we subscribe to APPROPRIATE TECHNOLOGY, a newsletter published by E.F. Schumacher's Intermediate Technology Development Group, Parnell House, 25 Wilton Rd., London SW1v 1Jf, UK. Airmail outside England is $8.50. Tom also suggested that we read Ivan Illich's ENERGY AND EQUITY and TOOLS FOR CONVIVIALITY. (L.J.)

We apologize to those who may have had difficulty reaching us during construction time at Portland State.
CONSCIOUSNESS

PSI Revolution Synergy Access issue, #5, April 1974. 21st Century Media, 606 5th Av., Northport, NY 11731. $5.00/year. Wes Thomas's information density packaging is only surpassed by the Oxford English Dictionary?

Karl Hess, 10 years ago was a speech writer for Senator Goldwater. Now lives in Washington DC's Adams-Morgan District, growing trout, working with the Institute for Self Reliance.

The Brain Revolution
Marilyn Ferguson

Injected with substances isolated from the urine of schizophrenics, volunteers have begun to hallucinate. The human brain is sensitive to weak magnetic fields. Mental activities can influence a nimbus of energy made visible by a high-frequency electrical field. This has been called the "Kirlian Effect" by Soviet researchers.

II Cybernetic Frontiers
Stewart Brand
Random House/Bookworks, 1974
About fanatic Space-War (Computer game) Participants around the country and other unusual uses of computers.

The vision helmet designed by Ivan Sutherland of Harvard. The helmet covers the front of your face with special goggles that are tiny computer driven TV screens. They present you with a visual space in which you can move. The computer monitors where your head moves and alters what you see accordingly. your head goes forward a foot and in the vision you soar a hundred yards.

Also in Cybernetic Frontiers Stewart Brand's encounters with Gregory Bakson (Steps to an Ecology of Mind)

No organism can afford to be conscious of matters with which it could deal at unconscious levels. If lake Erie is driven insane, its insanity is incorporated in the larger system of your thought and experience.

see also networks, social services

CONSCIOUSNESS

East West Journal
29 Farnsworth Street
Boston, Ma. 02210
$5.00 per 12 issues
Solar energy, Paolo Soleri, psychotronics, whirling dervishes, Gurdjieff, Uri, whole foods directory. Joel Schatz. (July 1974 issue)

"The life experiences determine what parts of the endowment are converted into functional attributes." (Rene Dubos. Man Adapting)

EDUCATION

A class in ALTERNATIVE ENERGY SOURCES for High School & Adults is being offered at OMSI this Fall. The instructor for this class will be Temple Larrabee. For the Energy Center Mr. Larrabee is staff design and consulting engineer. This past summer, Mr. Larrabee has been working up the design of a one meter diameter 3 meters high vertical shaft savonious rotor windmill. He will also soon be working on the design of a horizontal axis propeller driven windmill. He is now in the process of drawing up a solar fruit dryer, polishing up and assembling a calorimeter for direct measurement of the solar radiation, and making final modifications on a photoelectric pyrheliometer, (also for the measurement of the sun's energy). Mr. Larrabee is also gathering information and catalogs of specialized parts needed for some of the special projects now in progress and projected. (M. L.)

The National Science Teachers Association is preparing an energy packet under contract with the U.S. Office of Education. The address of the NSTA is 1201 16th St. NW, Washington, D.C., 20036.

DeSchooling Society
Ivan Illich. 1970
School is Dead
Everett Reimer
On Learning and Social Change
Michael Rossmann
Learning Systems for the Future
Ron Barnes. Phi Delta Kappa. Box 789, Bloomington, Indiana 47401. 50¢

Teggs 1994
Theobald and J. M. Scott

Career Education in the Environment
Produced for the US Office of Education by Olympia Research Corporation. 818 18th St. NW Washington, DC 20006

Prisma, a newsletter on private and alternate education
467 O'Farrel Street
San Francisco, Ca. 94102
A San Francisco bias. For Oregon Prisma representative, write: Harriet Smith Rt. 1, Box 109 Philomoth, Or. 97370

OCTOBER, 1974
OCTOBER, 1974

BEND IN THE RIVER EDUCATION COUNCIL
Gary Betts
Rt. 1, Box 113
Dufur, Or. 97021
Trying to implement the proposals brought out at the Bend in the River Council.

Grow
A free 12 week course in organic gardening. Janet Rullo, coordinator. Funded through Creative Outlet. Participants grew their own on a plot at 22nd and NW Pettygrove, while being instructed by teachers from PSU, PCC, Mt. Hood, OMSI and Extension Services. Still remaining. Oct. 3rd canning and preserving. 228-7987

GEE, Group for Environmental Education, Inc.
1214 Arch Street
Philadelphia, Pa. 19107
Publishers of excellent, especially urban environmental education materials. Making the City Observable. Description and extension of a traveling exhibit of maps, photos, simulations: ways to perceive the city. Currently being redone/enlarged. Ask for publication list.

OMSI'S IN SERVICE WORKSHOP PROGRAM, for elementary and High School teachers. Call 224-9500 for more information.
Oct. 11, 12, 13. Geologic History of the Central Washington Scabland area. $42 non members. $40 OMSI members.
Oct. 19. Sound and People. Techniques of measuring sound and noise, and relation to new standards, for noise pollution. $6, $5 OMSI members.

A BAROMETER MEASURES AIR PRESSURE. AN INCREASE IN AIR PRESSURE MEANS COOLER AIR IS COMING. A DECREASE IN AIR PRESSURE MEANS WARMER AIR IS COMING.

TO MAKE YOUR OWN BAROMETER:
1. STRETCH A PIECE OF BALLOON OVER THE NECK OF A BOTTLE. FASTEN IT SECURELY WITH A RUBBER BAND "PULLING OUT" ALL THE WRINKLES.
2. GLUE A LARGE NEEDLE INTO THE END OF A STRAW.
3. GLUE THE OPEN END OF THE STRAW TO THE MIDDLE OF THE BALLOON CAP.
4. ON A PIECE OF PAPER, MARK 10 STRAIGHT LINES, EACH 1/8" APART. NUMBER THE LINES 0 TO 10.
5. FIND A PLACE TO SET UP THE BAROMETER WHERE YOU CAN TACK OR TAPE THE PAPER TO THE WALL. PLACE THE PAPER SO THE NEEDLE POINTS TO THE NUMBER 5. (SOURCE: ALLAN BATES)

WHEN THE AIR IS HEAVIER, IT PRESSURES DOWN ON THE BALLOON CAP & CAUSES THE NEEDLE TO... THIS MEANS THE TEMP WILL GET...-
WHEN THE AIR IS LIGHTER, THE BALLOON CAP RISES & CAUSES THE NEEDLE TO... THIS MEANS THE TEMP WILL GET...-

EXPLORING SEATTLE, course taught by John Hancock, Richard Fleming, Donald Tubbs, summer 1974, Institute for Environmental Studies, University of Washington.

CONTINUED ON PAGE 10
Promising Practices in Oregon Education, 1974
Compiled by Evelyn Gunter, for the Oregon State Department of Education, 942 Lancaster Dr. NE Salem, Or. 97310
Over 40, specially funded programs with emphasis on career education, administrative design, education for emotionally disturbed and "difficult" students, staff development.

see also Agriculture-Food

ENERGY

Alternative Sources of Energy
Ed. by Sandu Eccll. $5.00
280 Whole Earth Catalog size pages
The best of the magazine, "Alternative Sources of Energy"; ranging from metaphysical to practical on wind, solar, networks, art, water, fuels, conservation, life support systems.

Lee and Graham are presently circulating a proposal to continue and expand their microfilming work. (Lee Johnson
224-9500)

Small is Beautiful E, F, Schumach­er. Harper & Row. 1973
There should be no place for machines that concentrate power in a few hands and turn the masses into mere machine minders.

Not surprisingly, therefore, if economic thinking pervades the whole of society, even simple non-economic values like beauty, health or cleanliness can survive only if they prove to be economic.

Give a man a fish, and you are helping him a little bit for a very short while, teach him the art of fishing and he can help himself all his life.

Just imagine you could establish an ideology which would make it obligatory for every able bodied person in India, to do that little thing -- to plant a tree a year, five years running. This in a 5 year period would give you 2,000 million established trees.

Dana C. Jennings, author, photographer is compiling a catalog for Garden Way Laboratories of supplies of hardware, plans, data, information and services for those working with alternative energy sources: sun, wind, etc.

If you or your group wish to be listed in the catalog, send data to Rt. 3, Box 177, Madison, S. D. 57042, in care of Dana Jennings (M.L.)

ALTERNATIVE ENERGY SOURCES

PROGRAM
OMSI. 4015 SW Canyon Road Portland, Or. 97221. 224-9500
Covers all areas of natural energy harnessing with emphasis on wind and solar power, auto gas conversion systems.
(Unfortunately probably filled by time this is printed)
TOWARD A STEADY STATE ECONOMY. Edited by Herman E. Daly, W. H. Freeman and co. 1973.
The Economics of the Coming Spaceship Earth. Kenneth Bolding.
Buddhist Economics. E. F. Schumacher.

Energy Conservation Strategies
EPA - Office of Research & Monitoring
Washington, DC 20460
EPA R5-73-021, July, 1973

ENERGY STUDY INTERIM REPORT
Office of Governor.
Methodology explained and preliminary reports on 14 major current and proposed energy delivery systems, including coal gasification, solar home heating, nuclear electric, oil shale, etc.

TOWARD A STEADY STATE ECONOMY
Edited by Herman E. Daly, W. H. Freeman and co. 1973.
The Economics of the Coming Spaceship Earth. Kenneth Bolding.
Buddhist Economics. E. F. Schumacher.

BASIC REQUIREMENTS FOR ESSENTIAL SERVICES IN OREGON FOR ONE DAY
(A Partial Recap)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance Serv.</td>
<td>1,026</td>
<td>95</td>
<td>1,723</td>
<td>17,000</td>
<td>3,670</td>
<td>85</td>
<td>730</td>
<td>213</td>
<td>170</td>
</tr>
<tr>
<td>Banks</td>
<td>2,153</td>
<td>68</td>
<td>110,000</td>
<td>60,000</td>
<td>150,000</td>
<td>1,682</td>
<td>4,250</td>
<td>3,400</td>
<td></td>
</tr>
<tr>
<td>Dentists</td>
<td>3,020</td>
<td>52</td>
<td>150,000</td>
<td>7,010,000</td>
<td>3,890,000</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td>175,334</td>
<td></td>
<td>118,257</td>
<td>8,180,000</td>
<td>3,890,000</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Fire Service</td>
<td>138,000</td>
<td></td>
<td>22</td>
<td>1,471</td>
<td>1,682</td>
<td>4,250</td>
<td>3,400</td>
<td>2,100</td>
<td></td>
</tr>
<tr>
<td>Government Hospitals</td>
<td>2,150</td>
<td>52</td>
<td>150,000</td>
<td>7,010,000</td>
<td>3,890,000</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Med. Warehouses</td>
<td>1,610</td>
<td>6</td>
<td>3,670</td>
<td>22,600</td>
<td>1,682</td>
<td>4,250</td>
<td>3,400</td>
<td>2,100</td>
<td></td>
</tr>
<tr>
<td>Clinical Lab</td>
<td>8</td>
<td>8</td>
<td>3,670</td>
<td>22,600</td>
<td>1,180,000</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Nursing Homes</td>
<td>8,660</td>
<td>9</td>
<td>88,000</td>
<td>32,600</td>
<td>1,180,000</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Pharmacies</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>279</td>
<td>7</td>
<td>746</td>
<td>599</td>
<td></td>
</tr>
<tr>
<td>State Military</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>279</td>
<td>7</td>
<td>746</td>
<td>599</td>
<td></td>
</tr>
<tr>
<td>Air N. Guard</td>
<td>20,000</td>
<td></td>
<td>1,365</td>
<td>23,880</td>
<td>1,360</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Army N. Guard</td>
<td>1,000</td>
<td></td>
<td>1,365</td>
<td>23,880</td>
<td>1,360</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Inland Water Carriers</td>
<td>17,260</td>
<td></td>
<td>1,365</td>
<td>23,880</td>
<td>1,360</td>
<td>22</td>
<td>9,932</td>
<td>6,360</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>349,091</td>
<td>331</td>
<td>213,214</td>
<td>7,307,718</td>
<td>7,361,485</td>
<td>1,257</td>
<td>3,535</td>
<td>100,218</td>
<td></td>
</tr>
<tr>
<td>Airports</td>
<td>14,314</td>
<td></td>
<td>202,850</td>
<td>7,307,718</td>
<td>7,361,485</td>
<td>1,257</td>
<td>3,535</td>
<td>100,218</td>
<td></td>
</tr>
<tr>
<td>Add. to Banks</td>
<td>822</td>
<td></td>
<td>1,233</td>
<td>8,219</td>
<td>213,699</td>
<td>1,257</td>
<td>3,535</td>
<td>100,218</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>364,227</td>
<td>331</td>
<td>213,214</td>
<td>7,307,718</td>
<td>7,361,485</td>
<td>1,257</td>
<td>3,535</td>
<td>100,218</td>
<td></td>
</tr>
</tbody>
</table>

The most complete report on information being collected, especially by the Center for Applied Energetics Office.

Boise Cascade has announced plans to open a geo-thermal heated nursery near La Grande.

CONTINUED ON PAGE 14
There is a lot of mapping going on in Oregon and Washington, by federal, state, county, city, and regional governments, and by private agencies, but unfortunately there is a long way to go before complete adequacy is in sight.

The four most important federal mappers are the Coast and Geodetic Survey, the Geological Survey, the Forest Service, and the Bureau of Land Management. The first, with its coastal charts and its nets of mathematical triangulations, underlies all the others. The Geological Survey is responsible for two current series of maps, both incomplete, and some superseded series too, also incomplete; furthermore its maps are the underpinning of the famous Army Map Service mapping, the series which for the first time in history, was pushed through to completion for every acre of American soil.

The Army series (issued also in a civilian version, handled by the Geological Survey) while admirable in many ways, must be given low marks in certain fields, notably legibility. Why two versions, a military and a civilian? I've seen them both; the difference seems to consist in just one feature: the grid or land net. The military version displays the ten-kilometer military grid, an entirely fictitious grid resembling (but not identical with) latitude and longitude. The civilian version displays the net of townships, a real, not fictitious, grid, inasmuch as it is actually marked out by witness trees, stakes, and landmarks.

Many would like to own at least one of the famous moulded plastic relief maps which have been made by an Eastern firm on the basis of the military version of the Army series. They're now available through retailers, after a long period of limited distribution through a military map office only. Captain's, a map shop which just opened in downtown Portland, sells them at around $10 each. The flat paper version hovers around $1 or a little more.

These Army maps are almost too stingy in their scale to be of great use to the walker, bicyclist, or leisurely motorist. They are at the scale of 1:250,000, yielding a mile which is only 1/4 of an

**US Geological Survey**

Map Information Office
Washington, DC 20242
Ask for all indexes to maps.

**Atlas of the Pacific Northwest**

Richard H. Highsmith Jr.
Oregon State University Press, Corvallis
5th Edition 1973 $7.50
Over 150 maps: fog, precipitation, cropland, forest land, transportation, manufacturing, vegetation, dams, wind, geology, newspaper circulation.

**Oregon Atlas**

Being prepared by William Loy, University of Oregon

Erwin Raisz Maps

130 Charles St.
Boston, MA 02114


The National Atlas of the United States

1200 S EADS St.
Arlington, Va. 22202
8 years in the planning. Election districts, agriculture, exploration, battlefields, climate, population, etc. Also very expensive reprints of pages available.

**Columbia Area Region Assn. of Governments**

6400 SW Canyon Court 297-3726
Portland, Or. 97221
Maps of various usefulness and currency. Ground water, zoning, topography, transportation. In general I think the most complete information in Portland area, along lines of information necessary for impact statements, zoning, land use planning.

**Oregon Department of Geology Mineral Industries**

1069 State Office Bldg.
Portland, Or. 97201
Maps of particular geologic areas, especially cascades and eastern Oregon. Some general free maps on mineral deposits.

Especially good:

- Thermal Springs and Wells of Oregon, detailed information, including temperature and flow.
- Geological Highway Map: Pacific Northwest Region Published by the American Association of Petroleum Geologists. Distributed by Dept. Geology Mineral Industries

**US Forestry Maps**

319 SW Pine
Portland, Or.
National Forest and Wilderness Area maps. First 5 are free. 15¢ each additional. Entire set (Oregon and Washington) $1.50
Also: National Forest Campground Directory for Oregon and Washington. 95 pp. Free
Also: Forest Trails of the Columbia Gorge
Also: Ranger District Maps - only sometimes available

**Map Distribution**

State Highway Bldg.
Salem, Or. 97310
An excellent state highway map, free. For low prices you can get air-photo-base maps of nearly all congested areas; black & white maps of all cities, except Portland. County maps. Drawbacks: some counties dissected into numerous sheets. Exhaustive legend/information.
get maps

Property Ownership
Though Metsger Co. produces detailed property maps available at many outlets (J.K. Gills in Portland) the only up to date information is available from County Assessment Offices. In Multnomah County 1021 SW 4th. 248-3325

Soil
In Portland, Soil Conservation Survey 1218 SW Washington Portland, Or. 97205 221-2751
Maps for general soil condition and on site survey.

Oregon Historical Society
1230 SW Park 222-1741
Portland, Or. 97205
A fine collection of old maps.

Coos County Carrying Capacity
% Office of Applied Energetics 370-4399
185 13th NE
Salem, Or. 97310

Mary Pederson, who worked on a carrying capacity study for Orlando, Florida (near Disney World) now helping do the same for Coos County.

Maps are the primary display and information dissemination tools, as developed by Ian McHarg Associates, Philadelphia, Pa. Map overlay technique of putting data base on top of data base until you have this one thick map (more or less) that tells you everything about the land.

Pacific NW Rivers Basin Commission
1 Columbia River (PO Box 908) 285-0467
Vancouver, WA 98660
A two year ($250,000) mapping project headed by Bill Bullard. They have one of the largest collections of mapped and categorized environmental information "libraries" in the Northwest.

National Ocean Survey
Distribution Div. c-44
Washington, DC 20235
The new world air charts now show almost all the land areas of the planet (a few Siberian and Antarctic sheets still in works). Ask for catalog of aeronautical charts and related publications.

Coast and Geodetic Survey
Rockville, Md. 20852
Shoreline and River Channel Maps.

Portland Map
City Engineers Office 248-4035
400 SW 6th
Large scale map 4' x 3' of Portland and surrounding area.

Tri-Met Route Map
A pretty and helpful map, including some information on special services. 235-3511

Washington Environmental Atlas
Being compiled by Army Corps of Engineers Seattle Office. 4735 E. Marginal Way S. Seattle, Wn. 98134
Steven Dice. 764-3624

Central Oregon Rockhound Guide
Published by the Forest Service; distributed by Prineville-Crook County Chamber of Commerce 390 W. Fairview, Prineville, Or.

Bureau of Land Management
Oregon State Office 234-3361
729 NE Oregon
Portland, Or.
They have a good size called "Master Units" 1" to 1 mile. Also if you are in South East Oregon where most BLM holdings are, water proof map of Steens Mountain – other recreational unit maps.
ENGINEERING

FELTON WHEEL

A pelton wheel is a pressure turbine which runs off a gravity water system. There is a rotor with cups merely spread around the rim inside the paper wheel. Each cup has a ridge in its center and a jet nozzle directs a high pressure stream of water on this ridge to give the wheel its speed and power. Pound for pound a pelton wheel is much more powerful than an electric motor. It takes about a 150 foot head, or fall, for best efficiency, but will operate on less.

FICTION

The Great Boom and Panic
Patterson, Robert T.
America's Great Depression and the Panic of 1919
Rothbard, Murray N.

ABSOLOUTELY MAD INVENTIONS, A.
Brown and H. A. Jelfcoft, Jr. Inventions—
silly, absurd, hilarious, useless or merely
fanciful—all of which have been granted
patents by the United States Patent Office.
An edible tie pin, a balloon propelled by
eagles and vultures, and a locket to hold
used chewing gum, are but three of the
proposed devices, all illustrated with the
inventors' drawings and descriptions. 57
full-page illustrations. Formerly Beware of
Imitations. 125pp. $1.50
dover publications

FUTURES

OREGON TOMORROW.
A conference on trend and opinion.
Sponsored by Futures Research Institute, Portland State
University, P.O. Box 751, Portland, Or. 97207. April 4-7, 1974. Background paper. Also included ideas
for the United States Bicentennial
Decade by Robert U. Lamson.
National Science Foundation.

The California Tomorrow Plan
by Alfred Heller, Los Altos, Ca.
William Kaufman, Inc. 120 pp.
1972. $2.50. Developed by
California Tomorrow.

see also Participation

GAMES

NEW GAMES TOURNEMENT. New
games Foundation. PO Box 40547.
San Francisco, Ca. 94110.
The tournament was staged in the
Marian headlands on two consecutive
weekends in October, 1973. It
brought together games inventors,
educators, authors, children, a
traveling commune, the military,
a citizens band radio group, land
acquisition and management person-
nel, social crusaders, and
people out to have fun.

see also Grants

GOVERNMENT

NATIONAL SPELEOLOGICAL
SOCIETY
Charles Larson
13402 NE Clark Rd.
Vancouver, WN. 98665
695-4143
"Oil Shale" Ore Bin. August, 1974
Entire issue.

see also GUIDES page 15

GRANTS

LEWIS AND CLARK SCHOOL OF
LAW has been awarded a substan-
tial seed money grant by the Lewis
W. and Maud Hill Foundation in
St. Paul, Minn., to establish the
Natural Resources Law Institute
over a three year period. The
Institute will focus on three areas:
the research of law as it affects
natural resource legislation, com-
unity education and curriculum
development. For further infor-
mation contact Jeff Foote, 244-
6161, x 545.

"Large Scale Interdisciplinary
Research Management"
National Science Foundation
$350,000
Donald E. Bevan
Institute for Environmental Studies
University of Washington
GUIDES TO THE LAND

Oregon Non-Parks  R. L. Benson, Route 2, Box 358
Portland, Or. 97231. $1.00
A description of 12 unique areas in the Portland area, not designated as parks.

Discovering Portland with Children Claudia Laninger and Arlene Haan. June 1976. $1.50
Parks, museums, ducks, tours, children's books, art galleries.

Now Where? Joyce Tuggle and Nancy Martin McCarthy. PO Box 339, Lake Oswego, Or. 97034. $2.25
Places in Oregon to go with kids.

Circling the City Junior League of Portland.227-7083
A guide to Portland for handicapped, including ramp, restroom information.

A Guide to the Trails of Badger Creek Roadless Area
Mt. Hood area.

On a Tank of Gas Sam McKinney and Gail Ferguson.
0302 SW Nebraska, Portland, Or. 97201. $1.75
47 places. 26 pages.

Within 100 miles of Portland.

From Portland to the Pacific Occasional Paper in Geography #2. Geography Dept. Portland State University


A photographic, historical and present, guide to Portland.

Oregon for the Curious Ralph Friedman. Caxton Printers. 1973. $3.95
Museums, houses, water falls, erratic rocks, lighthouses.

Treasures of the Oregon Country Maynard C. Drewson. Dee Publishing Co. 1020 Terrace Dr. NW, Salem, Or. 97304 $7.50
Written by a seeker of record giant trees and unnamed places.


Dept. of Geology and Mineral Industries 1069 State Office Bldg.,Portland, Or. 97201. Monthly "$2 Bin", $2.00/year. (recently most concerned with energy); and occasional geological papers, good guides to those areas studied, especially Central/South Eastern Oregon.
Meeting House Preservation Act (52877)
"the meeting houses . . . will not be exposition structures for a brief celebration, they will be centers wherein we shall all undertake to explore our ecological, educational, and historical preservation concerns"
A. W. Smith
Natl. Parks & Conservation Assn, 1701 18th St. NW
Washington, DC 20009

Northwest Folklore
Semi-annual journal. $2.50/year.
University of Oregon Books.
Eugene, Or. 97403

FORUM ON THE HISTORY OF PORTLAND'S NEIGHBORHOODS AND ETHNIC COMMUNITIES,
Sponsored by the Center for Urban Education and the Oregon Historical Society. Held March 27, 1974, bringing together over 35 people working on different oral history projects (and related studies) in Portland. A list of the oral history projects available from Center For Urban Education. 0245 SW Bancroft. Portland, Or. 97201.

NEIGHBORHOODS IN TRANSITION
Creative Outlet. 201 SE 12th
Portland, Or. 97214. 233-3654.
Documentation through the use of video taped interviews some of the effects of urban renewal in the Burnside neighborhood and tracing those effects to the Buckman community.
The video tapes so far collected have been aired at several community "town hall" meetings in an attempt to encourage residents to discuss the future of their neighborhood.
Coordinator: Jack Cox.

Chinook Centrex
Sometimes inclusions in Rain are based on what's new since the Centrex was computed. If that baffles you include a quarter with your reader enquiry card and receive a free copy. Limited number remaining.

FREEDOM OF INFORMATION CLEARING HOUSE
PO Box 19367
Washington, DC 20036

Old Glory. America the Beautiful Fund, 219 Shoreham Bldg.
Washington, DC 20005. $4.95
The grassroots historical preservation movement. Over 100 restoration projects, people histories; how to why to record your own history. Big book. Lots of Pictures.

ETHNIC HERITAGE PROJECT,
Center For Urban Education. 0245 SW Bancroft. Portland, Or. 97201. 224-1144
An Ethnic Heritage Studies (U.S. Office of Education) grant. The development of learning materials of the history of ethnic groups in Portland; and an "adapter's Guide", procedures for instituting similar programs. Susan Descamp and Kent Layden, staff.

INFORMATION
OREGON ENVIRONMENTAL COUNCIL "Environmental Bibliography" now being compiled.
Contact Gay Bower. 222-1963

Environmental Books, a selected list of books, periodicals & films at the Multnomah County Library. #1, #2, #3 available at library.

Dover Survival Kit
Dover Publications, Inc.
180 Varick St., NY, NY
A selective description of over 100 of Dover's best; construction, design, food, nature, identification, gardening, fantasy and supernatural.

FIRST INTERNATIONAL ENVIRONMENTAL SYMPOSIUM SERIES
EXPO 74.
Some documentation of the first series (May 19-21) available (including Peter and Lowen Thompson, David Brower). For more information; and to be notified of the ongoing documentation (audio, video and print) write to:
Spokane Community Video
West 1919 2nd ave
Spokane, Wn. 99204

CONTACT, a directory of Community Information Resources, Eugene, 1974. Compiled by the University of Oregon, student chapter of Special Libraries Assoc.
A really fine 128 page description of libraries, special collections, resource persons, information and referral projects, etc. Useful outside of Eugene.
School of Librarianship
University of Oregon
Eugene, Or. 97403.

OCTOBER, 1974

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Freezing point</th>
<th>Place to store</th>
<th>Storage conditions</th>
<th>Length of storage period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetables:</td>
<td>32° to 40°</td>
<td>Near 32° as possible</td>
<td>Dry</td>
<td>As long as desired, through late fall and winter.</td>
</tr>
<tr>
<td>Dry beans and peas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late cabbage</td>
<td>30.4</td>
<td>Pit, trench, or outdoor cellar.</td>
<td>Dry</td>
<td>To 6 weeks.</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>30.3</td>
<td>Storage cellar</td>
<td>Moderately moist.</td>
<td>Through late fall and winter.</td>
</tr>
<tr>
<td>Late celery</td>
<td>31.6</td>
<td>Pit or trench: roots in soil in storage cellar.</td>
<td>Moist</td>
<td>Through late fall and winter.</td>
</tr>
<tr>
<td>Endive</td>
<td>31.9</td>
<td>Roots in soil in storage cellar.</td>
<td>Dry</td>
<td>2 to 3 months.</td>
</tr>
<tr>
<td>Onion</td>
<td>30.6</td>
<td>Any cool, dry place</td>
<td>Moist</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Parsnips</td>
<td>30.4</td>
<td>Where they grow, or in storage cellar.</td>
<td>Dry</td>
<td>Do.</td>
</tr>
<tr>
<td>Peppers</td>
<td>30.7</td>
<td>Unheated basement storage room</td>
<td>Moist</td>
<td>Do.</td>
</tr>
<tr>
<td>Potatoes</td>
<td>30.9</td>
<td>Pit or in storage cellar</td>
<td>Dry</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Pumpkins and squashes</td>
<td>30.5</td>
<td>Home cellar or basement</td>
<td>Moderately moist.</td>
<td>Do.</td>
</tr>
<tr>
<td>Root crops (miscellaneous)</td>
<td>29.7</td>
<td>Pit or in storage cellar</td>
<td>Moist</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Sweet potatoes</td>
<td>31.0</td>
<td>Home cellar or basement</td>
<td>Moderately dry.</td>
<td>4 to 6 weeks.</td>
</tr>
<tr>
<td>Tomatoes (mature green)</td>
<td>29.9</td>
<td>Fruit storage cellar</td>
<td>Moist</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Fruits:</td>
<td>29.0</td>
<td>Near 32° as possible</td>
<td>moderately moist.</td>
<td>4 to 6 weeks.</td>
</tr>
<tr>
<td>Apples</td>
<td>29.8</td>
<td>Fruit storage cellar</td>
<td>Moderate dry</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>29.8</td>
<td>Fruit storage cellar</td>
<td>Dry</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Grapes</td>
<td>29.8</td>
<td>Fruit storage cellar</td>
<td>Moist</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Oranges</td>
<td>30.5</td>
<td>Fruit storage cellar</td>
<td>Dry</td>
<td>Through fall and winter.</td>
</tr>
<tr>
<td>Pears</td>
<td>29.8</td>
<td>Fruit storage cellar</td>
<td>Moist</td>
<td>Through fall and winter.</td>
</tr>
</tbody>
</table>
To Live with the Earth

Oregon Environmental Foundation
2367 SW Water
Portland, Or.
$1.00
(to be published middle of Oct.)

Information available from National Environmental Education Dissemination Fair held in Green Bay, Wisc. Aug. 27-28, 1970 Title III and Environmental Education Projects made presentations and answered questions. (L. W.)

LAND USE

SAUVIE ISLAND - WEST HILLS

COMPREHENSIVE PLANNING PROJECT is now being done by the Skidmore, Owings & Merrill Environmental Study Group in conjunction with the Multnomah County Division of Land Use Planning.

Last Wednesday, Sept. 11th, West Hills residents sat eight to a table in the Linton H. S. auditorium talking with their neighbors about what they liked about where they lived, what they wanted preserved, what they saw as problems to further development and what they wanted changed. Base data gathering and visual map display of flood plains, landslides & slope instability, agricultural capability, wildlife habitat, existing land use, current zoning and other factors thought by the Study Group likely to affect land use in the area were published in a "Land Use Newspaper" distributed to area residents. This data is now being revised to include information sent in by people who have lived in the West Hills for many years.

Copies of the "Land Use Newspaper" are available from the Multnomah County Division of Land Use Planning at (503) 248-3043. The next area land use workshop will be in early November. Call the above number for exact time & place.

Landuse Oregon, Newsletter
2637 SW Water Av.
Portland, Or. 97201

Bi-monthly report on land use legislation.

THE NATURE CONSERVANCY

The need for a preserved system of natural areas, appreciated by scientists such as Aldo Leopold and Eugene Odum for years, must be acknowledged more widely by citizens and land-use planners. There will be widespread use of such areas: by scientists to monitor the environment and obtain baseline data; by educators to teach an understanding and respect for the land; by land managers to revitalize unhealthy land; and by us all for recreation and enlightenment.

Three efforts are presently underway to preserve a system of natural areas. The federal agencies are setting aside a system of Research Natural Areas representing the basic natural communities found on federal land. The Oregon legislature has established a state committee on natural area preserves to develop such a system for state lands. For private lands, The Nature Conservancy has been taking the lead through land purchase and the Oregon Natural Areas Inventory.

The Oregon Natural Areas Inventory is an effort to obtain essential data for the creation of a comprehensive natural area system in Oregon. It will identify and evaluate important ecological communities; valuable habitats for plants and animals such as endangered species; significant natural features such as fossil beds or the biggest trees; and areas particularly valuable for education or research. The Inventory will be a resource for land-use planners, agency employees, scientists and conservationists. Without it land preservation will be hit and miss, and what we miss will be missed forever. As Aldo Leopold said, "the first rule of intelligent tinkering is to save all the pieces."

The Nature Conservancy is a 24 year old non-profit, tax-exempt corporation that obtains its funding through public subscription. The Conservancy's sole goal is the preservation of natural areas. This is accomplished in four main ways: direct purchase; acceptance of gifts of land; pre-purchase of ecologically significant land for conservation-minded government agencies who later buy them back; and the conducting of natural areas inventories.

In Oregon, the Conservancy is currently purchasing 175 acres along the Sandy River Gorge, just 25 minutes from downtown Portland. Securing this land will assure the perpetual protection of the Sandy River Gorge; the remainder of the area is in the ownership of The Nature Conservancy, the Bureau of Land Management, Multnomah County and the Campfire Girls, all of whom are dedicated to maintaining the Gorge in its natural and pristine condition.

The Gorge, and much of the Sandy River itself, has remained surprisingly untouched. It provides habitat for osprey, eagles, deer, elk, bear, mink and river otter. Salmon steel- head and sea-run cutthroat use the river, and the forest land on either side is moist and rich with great diversity of wildflowers and mushrooms. In order to purchase the key 175 acres, there is a fundraising goal of $23,000 by November 23 and a three year goal of $125,000 (Any contributions can be sent to the Conservancy's Northwest Office, 1234 NW 25, Portland, Or. 97210.)

Wayne Rifer
Coordinator
Oregon Natural Areas Inventory

1) Essentially a library is a collection of recorded information. But so is a bookstore, an attic filled with old letters, or a pile of last week's newspapers on a trash heap.

2) The "winter count" kept by the Dakota Indians from 1800 to 1870 was simply a series of 71 pictures inscribed on a buffalo robe. Each picture portrayed the most important event of a winter and it was enough of a reminder to the tribal chronicler to allow him to describe a year's history of the tribe.

3) The Associated Credit Bureau has data on over 100 million people.

4) The city is chock-full of "junior" librarians, operating covertly under such titles as Federal Information Center, Contact Center, Easter Seals, ... We hope in this 1, 2, 4, or 7 part series to come in contact with different traditional and untraditional librarians, librarians, proprietors and information coordinators.

There are approximately 182 public, 43 college and university, and 60 "special" libraries in the state of Oregon; in addition there are about 1200 public schools all of which have some form of library or another.

Bonneville Power Administration, Library and Technical Information Services
1002 NE Holladay Street
Portland, Or. 97208 234-3361 x 4445

Electrical Engineering, Law, 40,000 volumes. Public may use publications in library; inter-library loan service provided for individuals via public and academic libraries. Xeroxing at 5¢ per page. Johannes S. Schimmelbusch, head librarian.

Emanuel Hospital Medical Library
2801 N Cantonbein Av.
Portland, Or. 97227 280-4696

2,000 medical and nursing books with some sociology and psychology. Approximately 120 medical and nursing journal subscriptions. Use by hospital employees. Others in community may not take books out but may use on site. Inter-library loan and xeroxing available.

Evans Products Company, Corporate Library
PO Box 3295
Portland, Or. 97208 222-5592 x 353

Business library, emphasis on building materials. Large collection of annual reports, business periodicals. Permission must be gotten. Tammy Beals, librarian.

Good Samaritan Hospital and Medical Center
1015 NW 22nd Av.
Portland, Or. 97210 229-7336

Medical books and journals. Use by staff only. Mrs. Melvina Stell, librarian.

Hyster Company, Technical Information Services
2902 NE Clackamas
Portland, Or. 97208 280-7402

5,591 volumes on engineering, engineering design, metals, management, personnel, industrial engineering, welding. Also Hyster authored material, Hyster historical records and annual reports. To this date no restrictions in onsite use. Special loans. Some microfiche and viewers use in library. James Bobzien, supervisor.

Multnomah County Library
801 SW 10th Ave.
Portland, Or. 97205 223-7201

500,000 volumes. Special collections of US Government, Oregon state, and Oregoniana collection. In art room subject index to loose leaf picture materials, records. Circulating films, art reproductions, slides. Large collection of most local newspapers, newsletters and magazines. Foundation center reference center, with last year's tax records on all Oregon foundations and many national. Phone service; recently implemented a phone reference center, for answering reference questions within reason.

University of Oregon Dental School Library
611 SW Campus Drive
Portland, Or. 97201 225-8822

16,000 volumes in dentistry. Available to dental students and dental school personnel and to practicing dentists and members of their staff throughout Oregon.

Oregon Dept. of Geology and Mineral Industries
1069 State Office Building
Portland, Or. 97201 229-5580

Geology of the United States, with emphasis on Oregon. US Geological survey publications, US Bureau of Mines publications, theses and dissertations on geology in Oregon. Publications may be used in office. Some may be checked out by professionals for limited time. Copying 10 cents a page.

Oregon Historical Society
1230 SW Park Avenue
Portland, Or. 97205 222-1741

50,000 bound volumes, including periodicals, Oregon and Pacific NW history. Special collection of manuscripts (over 2 million loose sheets); accessible by "Guide to Oregon Historical Society Manuscript Holdings". Over 500,000 photographs. Microfilm collection of 750 newspapers (access: A Catalog of Microfilm collections). Open to all of college age and above, and to grade or high school students who present a note from teacher stating the subject of research and declaring they have exhausted the resources of the school and public libraries.
LIBRARIES

OCTOBER, 1974

Pacific NW Forest and Range Experiment Station Library, US Forest Service
809 NE 6th
Portland, Or. 97232  234-3361
23,000 volumes, forest disease, economics, engineering, products marketing, recreation, watershed management.

Pacific Power and Light Company Library
Public Service Bldg.
Portland, Or. 97226  226-7411 x 658
Engineering, electrical, geology, mining, environment. Loans by company employees and inter-library loan. Mr. W. L. Hutchinson, Librarian.

Portland State University
PO Box 1131
Portland, Or. 97207  229-4424
Major academic library in Portland. 460,000 volumes. Use by Portland State students/faculty; some guest cards where need exists and Oregon State System of Higher Education and metropolitan area college students.

Providence Hospital Medical Library
700 NE 47th
Portland, Or. 97213  234-3211 x 314
Nursing. Use by employees, patients, and other hospital libraries. Mrs. Margaret Sidney, Librarian.

United States Nat’l Bank of Oregon
Resource Library
PO Box 4412
Portland, Or. 97208
1,500 volumes. Banking and business. Speeches, theses, banking resources. Bank employees use. Correspondence with branches—books sent through mail. Chris Patterson.

State of Oregon, special libraries

Columbia Park Hospital and Training Center
400 E. Scenic Dr., The Dalles 97058  296-6171

Eastern Oregon Hospital and Training Center
P.O. Box A, Pendleton 97801  276-1711
Eugene Register Guard News Library
P.O. Box 1232, Eugene 97405  345-1551

Evans Products Company, Technology and Engineering Group, Box E, 1115 S.E. Crystal Lake Dr., Corvallis 97330  753-1211

Fish Commission of Oregon Library
17330 S.E. Evelyn St., Clackamas 97015  656-1457

Kaiser Foundation Hospitals, Portland: Medical Record Department
5055 N. Greeley, Portland 97217  285-9321

Medical Care Research Library
4707 S.E. Hawthorne Blvd., Portland 97215  223-5636

Multnomah Law Library
County Court House, Portland 97204  248-3394

Northwest Regional Educational Laboratory Library
400 Lindsay Bldg., 710 S.W. 2nd Ave., Portland 97204  224-3650

Oregon Board of Education, Retrieval-Dissertation Center, 942 Lancaster Dr. N.E., Salem 97301  378-3566

Oregon Graduate Center
19000 N.W. Walker Rd., Beaverton 97005  645-1121

Oregon Journal Library
1320 S.W. Broadway, Portland 97201  222-5511

Oregon Regional Primate Research Center
505 N.W. 185th Avenue, Beaverton 97005  645-1141

Oregon State Correctional Institution
3405 Deer Park Dr. S.E., Salem 97310  378-4290

Oregon State Department of Education, School for the Deaf, 609 Locust St. N.E., Salem 97310  378-6248

Oregon State Department of Human Resources, Children’s Services
516 Public Service Bldg., Salem 97310  378-3820

Oregon State Department of Human Resources, Health Division, Public Health Library, 773 State Office Bldg., 1400 S.W. Fifth Ave., Portland 97201  229-8678

Oregon State Department of Revenue, Research-Information Section, 202 State Office Bldg., Salem 97310  378-3727

Oregon State Department of Transportation, Highway Division, Highway Bldg., Salem 97310  378-6268

Oregon State Hospital
2600 Center St. N.E., Salem 97310  378-2348
Medical Library
378-2266
Patients’ Library
378-2370
Nurses’ Library
378-2363

Oregon State Penitentiary
2605 State Street, Salem 97310  378-2454

Oregon State University, Forest Research Laboratory, School of Forestry, Corvallis 97331  753-9166

Oregon State Water Resources Board
1158 Chemeketa St. N.E., Salem 97310  378-3671

Oregonian Library
1320 S.W. Broadway, Portland 97201  226-2121

Pacific Power and Light Company
520 S.W. 6th Ave., Portland 97204  226-7411

Portland Art Association, Museum Art School, Southwest Park & Madison, Portland 97205  226-2811

Portland General Electric Company
621 S.W. Alder St., Portland 97205  228-7181

Rader Pneumatics, Inc., Information Center
P.O. Box 10283, 6005 N.E. 82nd, Portland 97220  255-5330

Standard Insurance Company
P.O. Box 711, 1100 S.W. 6th Ave., Portland 97207  224-8151

Supreme Court Library of Oregon
Supreme Court Bldg., Salem 97310  378-6030

Tektronix, Inc., P.O. Box 500, Beaverton 97005  644-0161

Teledyne Wah Chang Albany
P.O. Box 460, Albany 97321  926-4211

U.S. Air Force, 827 ADG/SSL Library
Kingsley Field 97301  882-4111

U.S. Army Engineer District Library
P.O. Box 2946, Portland 97208  777-4441

U.S. Bureau of Mines, Technical Library
P.O. Box 70, Albany 97321  926-5811

U.S. Department of Commerce, Suite 501, Pittock Block, 521 S.W. Washington St., Portland 97205  221-3001

U.S. Department of Interior, Bonneville Power Administration, P.O. Box 3621, Portland 97208  234-3361

U.S. Environmental Protection Agency, National Environmental Research Center, 200 S.W. 35th St., Corvallis 97330  752-4211

U.S. Tongue Point Job Corps, Instructional Media Center, Astoria 97103  325-2131

U.S. National Bank of Oregon, Resource Library
261 S.W. Sixth Ave., P.O. Box 4412, Portland 97208  225-6111

U.S. Veterans’ Administration Domiciliary, White City 97501  826-3111

U.S. Veterans’ Administration Hospital, Sam Jackson Park, Portland 97207  222-2221

U.S. Veterans’ Administration Hospital, Roseburg 97470  672-4411

University of Oregon, Bureau of Governmental Research and Service, P.O. Box 3177, 130 Hendricks Hall, Eugene 97403  686-3048

University of Oregon, Career Planning and Placement Service, Susan Campbell Hall, Eugene 97403  686-3235

University of Oregon, Center for Gerontology, 1597 Agate St., Eugene 97403  666-4207

From Directory of Oregon Libraries
LAND USE
CONTINUED FROM PAGE 17

AMERICAN INSTITUTE OF PLANNERS, Chapter Newsletter
c/o Mid Willamette Valley Council
of Governments
Room 305 Civic Center
Salem, Or. 97301
August-Sept. issue. Article by Tom McCall on Energy and Planning.
see also Audio visual, GUIDES (page 15), Water

MEDIA

CABLE TV. On Sept. 12, the Portland City Council voted 5 to 0 passing an ordinance which requests permission to seek proposals for a city cable communications system and to negotiate with Multnomah County for a Metropolitan Communications Authority to administer the system. Last spring the Citizens Cable Study Committee drew up their design of the system which features home subscriber entertainment; cable providing public information and public access to television as well as a closed system cable to link such institutions as hospitals, schools and government agencies. Bid requests will go out in October and will be analyzed three months later. In six months the city council will vote on whether or not to accept a particular bid proposal. Interested parties should contact Kenneth McKeen at 248-428.

OREGON CITIZENS FOR RESPONSIVE MEDIA

A newly formed group concerned with the public service performance of local television and radio broadcasters in such areas as public affairs, public service announcements, editorials and news reporting. This fall, in anticipation of Federal Communications Commission review of station renewal applications, the group is performing: a citizen evaluation of the public service performance of local television broadcasters, and will publicize the results. Interested persons should call in Portland, 228-0666.

Portland Youth Communications Inc.
4760 N Lombard. 283-2591
Portland, Or.
To publish a tabloid size newspaper in late September. Ann Shimmin, editor.

Beginning amateur radio course.
Grade 7 and up, Preparation for Novice License Exam. Call OMSI for details. 224-9500

COMMUNITY FOCUS, an experimental project in community video telecommunication, funded by program IMPACT through Title I higher education monies, has been producing half inch video tape programs on the Corbett-Terwilliger Lair Hill area, and broadcasting these programs twice monthly over King Video cable. Upcoming is a series of twelve KPTV shows in cooperation with the Neighborhood Law Institute at Lewis and Clark School of Law, assisted in part by the Environmental Education Center. The KPTV programs on neighborhoods will be aired once a month on Sundays at 9:30 pm. Watch your program listings or contact 228-3532.

see also Participation, Audio-visual

NETWORKS

The Avocado Exchange
203 HUB
University of Washington
543-4375
The Avocado Exchange is an opportunity for people to express their needs, resources, desires, interests or shells through an open telephone exchange. You can register with the exchange by calling 543-4375 24 hours a day. The information registered in the exchange is printed once a quarter in the University of Washington Daily.

Roster of Environmental Resource Persons
The roster was compiled to provide the regional community with information regarding sources of knowledge in a broad spectrum of environmental fields and make the academic expertise of the University (of Washington) more accessible to the general public.

SEA-KING
Clearing house for environmental information funded by King County Neighborhood Youth Corps.
206-344-7690
302 Smith Tower Bldg.
Seattle, WA. 98104

The Couzens Machine, a Computerized Learning Exchange
Center for Research on Learning and Teaching
University of Michigan
Ann Arbor, Michigan
Report compiled by Ken Davis & Richard Libengood.
Developed for the residents of the Couzens Hall, a dormitory of the University of Michigan. Organized as a collective within the framework of a course and supported by an instructional development grant, the Couzens Machine provided over 400 residents with information on (1) other residents who shared the recipients' interests, (2) upcoming events in the Ann Arbor area and (3) misc. items such as cafeteria hours, typing, haircutting, laundry service.

NETWORKS for Research and Education, Ed. by Greenberg et al.
MIT Press, May 1974, $12.50
Covers computers and other interdisciplinary information exchange techniques. (Synergy Access)

New World Communications
PO Box E
MIT Branch PO
Cambridge, MA. 02139
A centralized broadsheet distribution. You pay $1.00 plus 4¢ per word or special price for flyer enclosure. $2 to be on subscription list.

OPEN, NW Information Network
1615 NE 63rd
Seattle, WA. 98115
524-9312
A listing of 3500 groups and individuals interested in sources and uses of energy, alternative futures, media, agriculture and technology. Information packets available that include lists of individuals and groups working in areas of shelter, farming, video, alternative sources of energy, media. For requests send at least $1.00 donation and self-stamped envelope.

Learning Exchanges, Ken Davis
50¢ from Futures Conditional
Box 1531
Wickenberg, AZ 85358
A directory to 42 learning exchanges in the United States.

see also Agriculture-Food, Media, Social Services

OCTOBER, 1974
OUTDOOR ED

Hancock happening. 3 day outing at OMSI's Nature Science Camp in John Day area. Call 224-9500 for details.

PARTICIPATION

SOME INTERACTIVE MEDIA AND CITIZEN PARTICIPATION PROJECTS

1. ACCESS(Alternative Comprehensive Community Environmental Study System), Santa Barbara Region; national office: 1730 K St., NW Washington, DC 20006
   Developing a computer-simulated model of Santa Barbara Region so citizens and decision-makers can feed in their theories and watch the results.

2. SYNCON, 2325 Porter St. NW Washington, DC 20008
   Sponsors conferences around the country, broadcast live over educational TV with viewer call-in.

3. Goals for Georgia, 506 Fulton Federal Bldg. Atlanta, GA 30303

4. Hawaii Commission on the Year 2000, Box 3110, Honolulu, HI 96802
   Promotes citizen participation through task forces, field studies, advisory groups and other means, and has enhanced communications through college and secondary courses, educational television and other media. Substantive issues include population stabilization, alternative economic futures, educational futures.

5. Council on Population and Environment, 100 East Ohio St. Chicago, IL 60611
   Aired television program on transportation in late 1973, received 2,000 telephone responses and 20,000 newspaper ballot returns.

6. Iowa 2000, 523 East 12th St.
   Des Moines, IA 50319

7. Massachusetts Tomorrow, 145 Hanover St. Boston, MA 02108

8. New Hampshire Tomorrow (defunct)

9. Feedback, Box 297, Troy, NY 12180
   Sponsored three TV programs with viewer call-in and newspaper balloting in Capitol District of New York State.

10. Regional Plan Association, 235 E. 45th St., New York, NY 10017
    Broadcast a series of television documentaries in the areas of Housing, Transportation, Environment, Poverty and Cities/Suburbs. Viewers responded through mail ballots.

11. Century 3 Project, The Institute, Box 174, Dickerson, MD 20735
    Has selected 13 small communities around the country (centered at Media, Penn., and including Bend, Ore.) for a pilot project using communications and data processing techniques to set community goals and "generate a genuine consensus around a preferred future." Plans to set up a telecommunications network linking all 13 communities by 1976.

12. Earthrise, Box 120, Annex Sta., Providence, RI 02901

13. Goals for Dallas, 825 One Main Place, Dallas, TX 75220
   Initiated in 1966, the group selected 12 areas: The Government of the City, the Design of the City, Health, Welfare, Transportation and Communications, Public Safety, Elementary and Secondary Education, Higher Education, Continuing Education, Cultural Activities, Recreation and Entertainment, and the Economy of Dallas. Through neighborhood meetings, which involved 100,000 participants, identified 106 specific goals, with definite steps to be undertaken by specific deadlines. States 'approximately 27% (of the goals) can be considered achieved.'

14. Citizen's Alternatives for Washington, Seattle (800) 552-7108 toll-free
   Supported by the state of Washington, estimates that a quarter million people will become involved this year. Policy options will be developed and presented to the public for consideration using radio, television and print media, in conjunction with telephone and newspaper polls.

COASTWATCH OREGON
PO Box 488.
Portland, Or. 97207 222-1963
Project of the Oregon Shores Conservation Coalition. A volunteer network, organized to monitor areas of environmental concern on the coast; and an educational program to research, compile and distribute materials on scientific, economic and planning issues relevant to coastal zone management. Contact Susan Brody.

Futures Conditional
Box 1531
Wickenburg, AZ 85358
Robert Theobald has directly and indirectly inspired several interactive media, "national values" testing projects.

ALTERNATIVES FOR WASHINGTON
312 First North, Seattle, Wn. 98109.
For a current report of this statewide goals for the futures of Washington program, ask for newsletter, "Alternatives".

CONTINUED ON PAGE 22
A Guide to Running a Recycling Project

A Guide to Running a Recycling Project

Recycling Information Office
Dept. of Environmental Quality
State of Oregon
1234 SW Morrison
Portland, Or. 97205
229-5555

Preparing materials, money and markets, publicity, education, depot equipment, legal requirements. Free.


Richard G. Duncan
Systems Science
Portland State University
A labor intensive and decentralized rather than mechanized and centralized approach to recycling. Hand carts, borrowed garages, the neighborhood recycling center.

see also Agriculture-Food, Whole Systems

SHELTER

There are old barn roofs through which you can see the stars, yet which won't leak in a hard rain storm.

see also Architecture

SOCIAL SERVICES

SOME CENTRAL PORTLAND AREA INFORMATION CENTERS

WASHINGTON COUNTY COMMUNITY ACTION ORGANIZATION
330 NE Lincoln
Portland, Or. 97123 648-6646
a) ACCESS. resource file on youth. 80 listings.

b) Offenders Alternatives, 80 listings.

c) Developmentally disabled information file
d) Presently involved in a total search for information resources for Washington County.

TRI COUNTY COMMUNITY COUNCIL

718 W. Burnside.
Portland, Or. 97209. 228-9131.
a) V File. 1,000 listings by service, subject. Cross-referenced.
b) General files. Annual reports, studies, clippings, etc.
c) Developing plans for computerized information system.
EASTER SEAL AID PROGRAM
4343 SW Corbett
Portland, Or. 97201 228-5108
Resource file listing 800 references, 500 subjects. All social service areas. Part of National Information and Referral program.

CONTACT
4343
erences,
Portland,
updated and cataloged. Emphasis
service areas. Part of National
PACE
Youth Commission Directory, etc.
Portland,
F:S:8D:8RAL INFORMATION C:8NT:8R
ral resources in Clackamas County.
directories, phone books, etc.
vice.
new centralized information
easily answered by staff of this
flow then anyone in the area.

Tu Do. Vietnamese cuisine
Meier
Near the Pioneer Post
New Sportsman Inn
15 NW 6th
Portland, Or.
Poetry readings, other show &
tell events. In August a movie
about poverty in Washington
County by Clyde Keller.

STOP THE FIVE GALLON FLUSH
A survey of alternate waste disposal systems, $1.75
Minimum Cost Housing Studies School of Architecture
McGill University PO Box 6070
Montreal, 101 Quebec, Canada
Classification and description of over 50 commercially available disposal systems.

Coastal Zone Management Problems
Jan. 1974
Land and Water Use in Oregon.
July 1974
Available from:
Water Resources Research Inst.
Air Resources Center
Oregon State University
Corvallis, Or. 97331
(503)754-1022
Ask for Publications List too.
see also Participation, Agriculture

WHOLE SYSTEMS
Metabolics of Metropolitan area", graduate status course taught by
Richard Duncan and Frank Terraglio, Autumn, Fridays 1-3:30 pm,
Portland State University. The
inflow, storage, processing, utilization and outflow of air, water,
information, people, raw materials, finished products, etc. 229-4960.

CULTURAL PARADIGMS PROJECT
Advanced Concepts Center
The Dept. of the Environment
Ottawa KIA OH3, Canada
(613) 997-3399
"To obtain, organize and criticize the written work of those who assert that a fundamental cultural transformation is occurring and/or needs to occur in western industrialized nations.”

The Delphi Method: Techniques and Applications
The first book devoted entirely to the Delphi method (anonymous, iterative questionnaires and computerized conferencing) has been completed by Professor H. Lindsay (FSU) and M. Turoff (Newark College of Engineering) and will be published by Addison-Wesley Publishing Co. in early 1975 (paperback and hard cover). This forecasting and communication technique is enjoying growing popularity in the US, Europe, and Japan on the part of government, business, and educational planners.

Shh Foundation Lecture Series
The Systems Science Program at FSU has been awarded a grant from the Shh Foundation to undertake a series of lectures on “Managing Complexity” early next year. The talks will be open to the public. Among the speakers: Professor C. West Churchman, University of California - Berkeley, and Professor Heinz von Foerster, University of Illinois.

Planning oriented courses in Systems Science at Portland State University (for details call 229-4960)
Fall 1974 - Beginning Sept. 30
Technological Forecasting I
Mon 6:40-9:20pm Goslin
Social Forecasting Seminar
Thurs 1-3:30pm Gibbs/Linstone
Modeling I
Tues, Thurs 4-5:30pm Duncan
Design Systems
Tues, 3-5:30pm Maruyama
see also Agriculture, Recycling
CALENDAR

Oct. 2-----Mazamas Wednesday evening program on Mt. McKinley. 909 NW 12th, Portland, 8 PM

Oct. 3-----"Population and the American Predicament" Lecture by Barbara West, California Institute of Technology. Eliot Hall, Reed College, Portland, 10:30 PM.

Oct. 3-----LCDC Workshop. Yaquina View Elementary School. Yaquina, Or. 7:30 PM

Oct. 3----- LCDC Workshop. Central Point Scenic Jr. High School Cafeteria. Central Point, Or. 7:30 PM

Oct. 4-5-----Population Year Conference. Friday, in general, Saturday, Oregon. $6, 3 meals. Claudia Webster, 229-5777 for details. Portland.

Oct. 5-----10-4 PH. Pands on Video Shop. Outlet. 201 SE 12th. Portland, confirm 233-3651

Oct. 7-----LCDC Workshop. Oregon City High School, Oregon City, Or. 7:30 PM

Oct. 7-----LCDC Workshop. Hillsboro High School, Hillsboro, Or. 7:30 PM

Oct. 7-9-----Geothermal Conference on Resources for Industrial and Commercial-Residential Uses. PO Box 1901, Klamath Falls, Or. 97601


Oct. 10-12-----Limits to Non-Growth. Conference on impact of fundamental change in economy. Contact Dennis Pirages. RM 512. Humanities Library, University of California-San Diego. La Jolla, Ca. 92037

Oct. 11-----LCDC Commission meeting. Governor's Conference Rm. State Capitol. Salem, Or. 1:30 PM


Oct. 16-17-----Flexibility in Development: Creating Quality Urban Environments. Center for Urban Education workshop. 0245 SW Bancroft, Portland. 224-1114. $5.00. Non credit. 6:45-9:30 PM

Oct. 17-----"Europe: Changes in Cast and Course". Martha Darling, Battelle-Seattle Research Center. Eliot Hall, Reed College. 10:30 AM. Free

Oct. 18-----Environmental Education State Advisory Committee meeting open to anyone interested in Oregon environmental education. Mary Lewis, State Dept. of Education, 942 Lancaster Dr., Salem, Or. 97310 or Environmental Education Center (229-4682) for time and place.


Oct. 24-----"The Environment Chooses: Prescience or Regrets" Michael McLloskey, director, Sierra Club. Eliot Hall. Reed College. 10:30 AM. Free

FUTURE EXPO SYMPOISIA

Environment and Law-------------------Oct. 17-19
Environmental Education-----------------Oct. 25-27
76 Week and Agenda for Tomorrow
Focusing on our responsibility for the future of our community, region, and world. Also Bicentennial opportunity.

Call or write Environmental Symposium Center, Expo 74, Spokane, Wa. 99210

ENVIRONMENTAL EDUCATION CENTER
Portland State University
PO Box 751
Portland, Or. 97207

NON-PROFIT ORGANIZATION
U.S. POSTAGE
PAID
PORTLAND, ORE.
PERMIT NO. 770

Address Correction Requested