This magazine is published in the most livable city in the U.S.

INSIDE:

Ecotopia
by Ernest Callenbach

Conscious Culture of Poverty
by E. F. Schumacher
RAIN DROPS

Future issues: In the next issue we want to do special collections on:
- Employment (examples of environment-enhancing, energy-conserving kinds of livelihoods, and groups working in those areas, etc.)
- Personal changes (the relation of perception/mental tone and environmental enhancement; “becoming,” not “having”)
- Library journals (and other small access journals)
- Plants and energy conservation
- Looking down from above (aerial photographs, the world from above, etc.
- Wood heat

In upcoming issues we’re also looking for information about: your favorite example of appropriate technology, health insurance, regional resource inventories, craft/small industry newsletters; local/buy region sources of information for urban and rural farming; learning exchanges; public interest research groups; and a directory of video/cable projects, books, etc., especially in the N.W.

Please send us your ideas. Deadline is about the 20th of each month. Please also note that for items for the calendar.

- We are out of RAIN, Vol. 1, issues 1-6. We will make reprints at 25¢ a page.
- If you have moved or are about to move, tell us; this saves us ten cents and keeps you from losing an issue of RAIN. See subscription & Change of Address Form, p. 31.
- Please remember to send a self-addressed stamped envelope in writing to people listed; especially when they obviously have little or no budget and are not in the information & referral business.
- PLEASE INCLUDE PAYMENT, AS WE DO NOT BILL.
- What do you think? Should we tell you who reviews what? Initials after reviews?
- Letters you send us may be quoted in the newsletter. Tell us when you feel you’d rather people didn’t know.

SUBSCRIPTION RATES: It has been rather traumatic changing over to subscription. We keep changing our rates because we really don’t know what’s fair. We try to be responsive to special circumstances, so contact us before giving up. (Subscription Form, p. 31)

Eugene Food Action Council
P.O. Box 1255
Eugene, OR 97401

Some exciting developments this summer in Eugene as the council sponsored the first community food conference. Groups formed at the conference are working on 1) forming a theater group to work with groups on food and health, 2) more “large” scale distribution of food among organic/natural foods distributors, 3) a lobbying group, 4) an urban farm learning site, 5) skill resource sharing newsletter, and otherwise disseminating information through existing networks.

A directory and resource inventory were prepared among conference members; and recently (Sept. 27) they held a harvest festival, where demonstrations included heating with wood, food preservation, natural foods bake-off, square dancing, a bicycle-powered blender.

AGRICULTURE:FOOD

An EPA-sponsored study rating the quality of life in 243 metropolitan areas across the country found only Portland among the 65 metropolitan areas with populations of more than 500,000 to have an outstanding rating in all categories rated.

IFOAM (International Federation of Organic Agricultural Movements)
3 Chemin de la Bergerie
91700 Ste. Genevieve des Bois,
France
American contact:
Rodale Press
33 East Minor
Emmaus, PA 18049

Primarily a vehicle of communication for member groups. Exhaustive listings each month of new books and periodicals in the field. Last issue of newsletter had article on a growing international seed bank. Important cross-Atlantic network. ($13 individual and $26 institutional membership rates.)

Southern Institute for Alternative Agriculture is in the formative process, at the pre-funded state looking for input according to Elizabeth Gottschalk, co-founder. (Florida Agricultural and Mechanical University, Tallahassee, Fla. 32307.) The Institute would research, disseminate, demonstrate: low-energy agriculture, organic gardening, general environmental education, and aid for the small farmer.
In Ecotopia’s Big Woods

Ecotopia, by Ernest Callenbach,
Banyon Tree Books, 1517 Francisco
St., Berkeley, CA 94703.

Ecotopia is a singular work, like the
wheel it looks obvious.
A steady state, spiritual rather than
economic conscious society. It’s more
like a kit than any Utopia I’ve read
or like a ten-year plan... Yes, flawless,
of course, but even these are nicely
angled odd things. It felt like I had felt
a new feeling when I read it. I remembered how to ask (What can we make
the world into?)

Somehow looking at the earth from
the moon, even second hand, teaches
you something about your neighbor. We need big pictures. Ecotopia is a
unique one.

Healdsburg, May 17. Wood is a major factor in the topsy-
tury Ecotopian economy, as the source not only of lumber
and paper but also of some of the remarkable plastics that
Ecotopian scientists have developed. Ecotopians in the city
and country alike take a deep and lasting interest in wood.
They love to smell it, feel it, carve it, polish it. Inquiries
about why they persist in using such an outdated material
(which of course has been entirely obsoleted by aluminum
and plastics in the United States) receive heated replies. To
ensure a stable long-term supply of wood, the Ecotopians
early reforested enormous areas that had been cut over by
logging companies before Independence. They also planted
trees on many hundreds of thousands of acres that had once
been cleared for orchards or fields, but had gone wild or lay
unused because of the exodus of people from the country
into the cities.

I have now been able to visit one of the forest camps that
carry out lumbering and tree-planting, and have observed how
far the Ecotopians carry their love of trees. They do no clear-
cutting at all, and their forests contain not only mixed ages
but also mixed species of trees. They argue that the costs of
mature-tree cutting are actually less per board foot than clear-
cutting—but that even if they weren’t, it would still be desirable
because of less insect damage, less erosion, and more rapid
growth of timber. But such arguments are probably only a so-
pisticated rationale for attitudes that can almost be called
tree worship—and I would not be surprised, as I probe further
into Ecotopian life, to discover practices that would strengthen
this hypothesis. (I have seen fierce-looking totem poles out-
side dwellings, for instance.)

Certainly the Ecotopian lumber industry has one practice
that must seem barbarian to its customers: the unlucky person
or group wishing to build a timber structure must first arrange
to go out to a forest camp and do “forest service”—a period of
labor during which, according to the theory, they are supposed
to contribute enough to the growth of new trees to replace
the wood they are about to consume. This system must be
enormously wasteful in terms of economic inefficiency and
disruption, but that seems to disturb the Ecotopians—at least
those who live in and run the lumber camps—not a bit.

The actual harvesting of timber is conducted with surprising
efficiency, considering the general laxness of Ecotopian work
habits. There is much goofing off in the forest camps, but
when a crew is at work, they work faster and more cooperative-
ly than any workmen I have ever seen. They cut trees and
trim them with a strange, almost religious respect: showing the
emotional intensity and care we might use in preparing a ballet.

I was told that in tougher country ox-teams and even horses
are used in lumbering, just as they were in Gold Rush times.
And in many areas a tethered balloon and cables hoist the
cut trees and carry them to nearby logging roads. But in the
camp I visited (which may be a showcase) the basic machine
is a large electric tractor with four huge rubber tires. These are
said to tear up the forest floor even less than oxen, which have
to drag timber out on some kind of sled. Though heavy, these
tractors are surprisingly maneuverable since both front and
rear wheels steer. They have a protected operator’s cabin amid-
ship; on one end there is a prehensile extension bearing a chain
saw large enough to cut through all but the hugest trees, and
mounted so it can cut them off only a few inches above ground
level. (This is of course pleasant aesthetically, but it is also
claimed that it saves some millions of board feet of lumber
each year, and helps in management of the forest floor.) This
saw can also cut trees into loadable lengths.

On the other end of the tractor is a huge claw device that
can pick up a log, twirl it around lengthwise over the tractor,
and carry it to the logging road where big diesel trucks wait
to be loaded.

Ecotopian foresters claim that this machinery enables them
to log safely even in dry weather, since there are no exhausts
likely to set fire to undergrowth. It does seem to be true that
their methods disturb the forest very little—it continues to
look natural and attractive. Several types of trees usually
grow in stands together, which is supposed to encourage wild-
life and cut the chances of disastrous insect and fungi inva-
sions. Curiously, a few dead trees are left standing—as homes
for insect-gobbling woodpeckers—and there are occasional
forest meadows to provide habitats for deer and other animals.
The older trees seed young ones naturally, so the foresters
generally now only do artificial planting in areas they are
trying to reforest. The dense forest canopy keeps the forest
floor cool and moist, and pleasant to walk in. Although it
rained for a few hours during my stay, I noticed that the
stream passing near the camp did not become muddy—evident-
ly it is true, as they claim, that Ecotopian lumbering leaves the
topsoil intact, cuts down erosion, and preserves fish. (I didn’t
actually see any fish—but then I am the kind of person who
seldom sees fish anywhere.)

The lumber camps themselves do not have sawmills, though
they possess portable devices with which they can saw rough
boards in small quantities for their own needs. The main
squaring and sawing of timber, and the production of slabs for
pulp, takes place at mills located in more open country, which
buy logs from the forest camps. The resulting boards are then
sold, almost entirely in the county-sized area just around the
mill. Lumber sales are solely domestic; Ecotopia ceased lum-
bering during which, according to the theory, they are supposed
to contribute enough to the growth of new trees to replace
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said to tear up the forest floor even less than oxen, which have
continued on page 4
The co-op movement, according to an article others. It’s called the union’s biggest local-has advanced by Jack Crellin in the $30,000 paperback size.

A big union is getting into the food non-profit basis to sources of tools and supplies. Emphasis treatment and control of environment for good results, the correct plants. Comprehensive, useful bibliography. Instructions for building different greenhouses on kind of greenhouse to build for certain types of plants. One truck I saw has lost its bumper, and the replacement is a large, sturdy piece of wood. As they wear out, the trucks will be eliminated in favor of electric vehicles. Meanwhile, people argue hotly over the bumpers—extremist ideologues saying that the bumpers (which are actually stainless steel, not chrome place) should all be replaced with wood, and the traditionalists maintaining that the trucks should be treated as museum relics and kept in original condition. The facts seem about equally matched, which means that the traditionalists have won so far—since a change on such a “drastic” matter is only carried out if there is a virtual consensus.

Our economists would surely find the Ecotopian lumber industry a labyrinth of contradictions. An observer (like myself) can come only to general conclusions. Certainly Ecotopians regard trees as being alive in almost a human sense—once I saw a quite ordinary-looking young man, not visibly drugged, lean against a large oak and mutter “Brother Tree!” And equally certainly, lumber in Ecotopia is cheap and plentiful, whatever the unorthodox means used to produce it. Wood therefore takes the place that aluminum, bituminous facings, and many other modern materials occupy with us.

An important by-product of the Ecotopian forestry policies is that extensive areas, too steep or rugged to be lumbered without causing erosion, have been assigned wilderness status. There all logging and fire roads have been eradicated. Such areas are now used only for camping and as wildlife preserves, and a higher risk of forest fire is apparently accepted. It is interesting, by the way, that such Ecotopian forests are uncannily quiet compared to ours, since they have no trial-bikes, all-terrain vehicles, airplanes overhead, nor snowmobiles in the winter. Nor can you get around in them rapidly, since foot trails are the only way to get anywhere.

Has Ecotopian livestock or agricultural production suffered because of the conversion of so much land to forest? Apparently not; vegetables, grains and meat are reasonably cheap, and beef cattle are common features of the landscape, though they are never concentrated in forced-feeding fattening lots. Thus an almost dead occupation, that of cowboy, has come back. And cattle ranches in the Sierra foothills have reverted to the old summer practice of driving their stock up to the high valleys where they pasture on wet mountain meadow grass. Grasslands research is said to be leading to the sowing of more native strains, which are better adapted to the climate and resist the incursion of thistles. Pasture irrigation is practiced only in a few areas, and only for milking herds.

But the true love of the Ecotopians is their forests, which they tend with so much care and manage in the prescribed stable-state manner. There they can claim much success in their campaign to return nature to a natural condition.

**AGRICULTURE-FOOD continued from page 2**

The Handmade Greenhouse: from windowsill to backyard, by Richard Nicholls, 128 pp., $4.95 from Running Press 38 S. 19th St. Philadelphia, PA 19103

This makes you feel you could build it yourself by giving you all the information. Assumes no previous building experience, presents specific plans and detailed instructions for building different greenhouses ranging from $2 to $1500. Lists sources of tools and supplies. Emphasis on kind of greenhouse to build for certain types of plants, how to equip it properly, maintain an ecological environment for good results, the correct treatment and control of “hothouse” plants. Comprehensive, useful bibliography. We need this one in hip-pocket paperback size.

A big union is getting into the food co-op movement, according to an article by Jack Crellin in the Detroit Free Press. The United Auto Workers’ local 600—the union’s biggest local—has advanced $30,000 for members to buy farm produce, which will be made available on a non-profit basis to UAW members and others. It’s called ’Workers’ Market No. 1. (Environmental Action Bulletin)

**Comparative Efficiency of Energy Use in Crop Production**, by G.H. Heichel, free bulletin no. 739, Nov. 73, from Connecticut Agricultural Experiment Station New Haven, CT 06504

*Full of useful numbers, ending with suggestions for increased energy efficiency via green manure fertilizing— the future spreader returns!*—and using crop residue for fuel. Long and comprehensive bibliography. Ask for their publications list.

**The Food Co-Op Project**

64 East Lake St. Chicago, IL 60601

In collaboration with the Illinois Assoc. of Community Action Agencies, has produced a good introductory guide to starting a food cooperative. $1.00. You’ll need localized information, but this will help you remember the parts that keep them together. They’ve also just completed the 4th edition of the Food Cooperative Directory, a nationwide listing of about 2,000 food stores, warehouses, bakeries, resource organizations. ($3.00 for that and their newsletter *Nooz*).

When I visited there this summer, I was also impressed with their on-site range of information on co-ops, rural organizations, farming, community projects.
This map was handdrawn by our good friend Bob Benson. We are going to overlay it (larger size) issue by issue with locations of important places and connections, starting with energy/environment centers. Send us information of places we should include.

**Agriculture/Energy Project Reports**

Center for the Biology of Natural Systems
Box 1126
Washington University
St. Louis, MO 63130
(314) 863-0100, x. 4983/x. 4994.

Barry Commoner's team has completed six excellent studies which are available free:

- **CBNS-AE-1:** Effect of Recent Energy Price Increases on Field Crop Production Costs, Dec. '74, 108 pp.
- **CBNS-AE-2:** Vulnerability of Crop Production to Energy Problems (simplified version of CBNS-AE-1), Jan. '75, 34 pp.
- **CBNS-AE-3:** Agricultural Resources Consumed in Beef Production, June '75, 41 pp.
- **CBNS-AE-5:** Energy in Corn Belt Production, July '75, 15 pp.
- **CBNS-AE-6:** A Comparison of Organic and Conventional Farms in the Corn Belt, July '75, 27 pp. (simplified version of CBNS-AE-4).

**Washington Cooperative Federation**

102 N.E. 43rd St.
Seattle, WA 98105

The federation is an association of food buying clubs and food co-op stores throughout Washington. We are sporadically printing a newsletter and doing some joint bulk buys, as well as trying to get organized and define our goals, structure and membership. Meetings of all co-ops interested are held every couple of months to work on these things; there is also a rotating committee structure to work on specific projects. We would particularly like to hear from co-ops in Washington that aren't on the mailing list and/or who haven't been receiving the newsletter.

**The Institute for Local Self-Reliance**

1717 18th St. N.W.
Washington, DC 20009
(202) 232-4108

Has a striking (don't put it up on a bright green; it will pull tacks and walk away); 24"x30" The Urban Farmer, jam-packed with basic information on about 50 vegetable crops, information including pound yield per 10' row, protein, companion plants, depth to plant, nutrients, ph range, and more. $2.00. They also have published some results on vegetable yields using different methods of farming (hydroponic, organic, British, US, etc.). Newsletter is expected to begin this fall.
Farallones Institute
13290 Coleman Valley Rd.
Occidental, CA 95465
Sim VanderRyn and David Katz,
Directors

There is sure a lot happening at the 80-acre rural site in Occidental—26 students and 11 faculty people of all ages living together for the summer (with a month's advance work by the faculty), have built a solar shower, elivus toilet, composting privy (a second, modified one is in the works), an organic garden, and a kitchen; they've carved beautiful wooden stools for their outside dining area and a sink for the shower—growing out of courses and workshops on carving, joinery and blacksmithing. Cina-ram bricks are being tested on the second privy foundation. Work has started on a blacksmith shop, a design studio and other structures (everyone presently sleeps under the stars), as well as a grey water system for the garden. They're even tackling such sticklers as health and building inspectors—meticulously explaining the compost privy system and working through the problems of moving local authorities along.

With so much happening, their overall planning is a bit haphazard, and integration of "whole systems" could go much further. Their work schedule has been heavy—generally up at 6 a.m. (some up at 5 to meditate in a beautiful outdoor zendo) and hasn't left them much time to read and reflect and plan. The energy is high, and one of the best things was the community feeling—everyone helps in the kitchen on a rotating basis and trades off on other jobs necessary for a community of 40+ to operate. A number of people, including Wilson Clark, J.B. Blunk (who started the wood carving), and China authority Orville Schell (recently returned from a 3-month work trip to China) have given workshops and short courses. My favorite time was a warm loving circle every night just before supper.

The summer session is over now, but a core group of people are staying on. It feels like an excellent way to get experience in the practical aspects of alternative energy systems, building and agriculture, as well as cooperative living. (LdM)

Farallones Institute—Urban Site
Helga and Bill Olkowski, Directors

The Urban Site is equally exciting, though we were only there an hour. They've just about finished renovating a run-down Victorian house to include a greenhouse, design studio, elivus, solar water heater complete with complicated testing capabilities (in true California style, they've made no provisions for space heat—though there is a wood stove in the kitchen), a peculiar semi-Japanese bath and living space. An organic garden is thriving as are rabbits, chickens and compost pile on the tiny urban lot. The heavy emphasis is on urban biological systems rather than energy generation—there was a good balance in the garden between scientific documentation/experimentation, demonstrating urban gardening possibilities, and the elegance of natural systems. The amount of time, effort and dollars spent on the architectural modification seems a bit overdone, but it probably speaks well to Bay Area urbanities. This is certainly one of the best urban projects in existence! (LdM)

Handcarved sinks at Farallones Rural Site (use solar-heated water)

National Film Board of Canada
Trudy Kamphuis
344 12th Ave. S.W.
Calgary, Alberta
(403) 231-5332

Dear RAIN: Enclosed is a raft of material related to distribution of the New Alchemists film put out by Challenge for Change of the National Film Board of Canada. I have had trouble trying to reach you by phone, so this is the general intention in words.

I am working to set up a network of alternatives information particular to western Canada and thought this might perhaps be of interest to you. It is under the auspices of Challenge for Change, and in the next few months I am hoping to contact as many people as possible interested in seeing or talking about the film and others along a similar vein. (Workshops so far set up are in Calgary, Alderflats, potentially in Lethbridge and various communities in the Kootenays and eastern B.C.) Contact me at the film board offices in Calgary. On the other side, I would appreciate being put on the mailing list for RAIN to tie into establishing a communication network here (will send the final info when it gets done if you like).

There are some problems taking films across borders, but there is a National Film Board office in San Francisco (Canadian Travel Film Library, Suite 1600, 44 Montgomery St., San Francisco, CA 94104, (415) 981-1448. T. Johnston) that would have access to the films in lieu perhaps.

Hoping to hear from you. Trudy Kamphuis.
The Community Services Administration (formerly OEO) is in the process of trying to set up a National Center for Appropriate Technology with initial funding of $3 million. A planning committee, including Community Action Agency people from different parts of the country and a.t. people such as Gene Eccle, Tom Bender, Helga and Bill Olkowski, Chris Price, Kye Cochran and John Borrego, has met twice in August. The small center is to use 75% of its funds as grants for innovative development and demonstration projects that will benefit low income communities. Grants will be under $10,000 so as to discourage large interests from making eyes at the money. The small staff is based in Butte, Montana, will evaluate and disseminate information on a.t., open up other federal programs so that low income people get a fair share of the government energy r&d, conduct training sessions, etc. The center will also fund regional coordinators to keep itself as decentralized as possible. Sam Love (formerly of Environmental Action and Editor of the Feb. 1975 Futurist on a.t.) is writing the proposal. The center has great potential both because of the welcome (and long overdue) federal government support of a.t. and because of the strong existing network of local community action organizations around the country—many of whom are already implementing a.t. ideas for poor people. Thorny political problems remain to be solved before anything gets off the ground, but they’re off to a good start—we’ll keep you posted. (LdeM)

more academically oriented than programs at Community Technology, Max’s Pot, Farallon, or New Alchemy. Hosted by Murray Bookchin, and with workshops by visitors such as Karl Hess, Stewart Brand, Wilson Clark, Eugene Eccle, Bob Reines and others, the program had a large enrollment of 15 people, despite high tuition—most of which went to keep the rest of the college afloat.

The by now usual range of solar collectors, wind mills, methane generators, aquaculture ponds and organic gardens were nearing completion by the time we were there in mid-August. The ambitious organic garden pointed out one of the recurring problems of academic schedules—when the crops are ready, the students have left. The nice thing about the redundancy of such energy experiments is that each group tries some different combinations. Goddard folk were using septic tanks for solar heat storage—but also for algae and aquaculture. The highlights of their experiments for us were the number of energy-conserving experiments applied to an old farmhouse by a group working with Eugene Eccle—insulating curtains, through-wall solar heaters, ducted outside combustion air and thermo-grate for a fireplace, etc.

The thinking in the program seemed heavily and uncritically based on a single philosophical approach—"anarchic communism"—and might well benefit by more comparative analysis of other societal structures such as traditional Asian societies, present-day China or Vietnam, Cuba or Scandinavia.

Along with other new learning/workshop centers, the Goddard program points the direction to some more meaningful and workable learning processes. (TGB)

Ekoteket
c/o The Museum of Modern Art
Sklepshofnsplan
Stockholm, Sweden
An information center, public library and information gathering system on alternative technologies and ways of habitation based on ecologically adapted technologies. They are now trying to locate, monitor and acquire the most relevant and interesting books, periodicals and reports in this area. If you have methane info to share, send it to Keith Olkin at Ekoteket.

Earth Cyclers
Rt. 1
Edwall, WA 99008
(509) 236-2353
Earth Cyclers is setting up a small farm methane and wind irrigation system with the help of a grant from Hunger Action Center in Olympia. Three two-month apprenticeships or two three-month apprenticeships are being offered to persons who want to learn about alternative energy systems, organic farming and communal living while helping with this project. Persons interested in being apprenticed either this fall or next spring should contact us.

A Simple Portable Shower
Using a pump type 3-1/2 gallon garden sprayer and a sink hose sprayer head with the hose. This is a good way to have a shower in an area where there is little or no water. John A. McGorge (11 Eills St., Norwalk, CT 06850) sent us a handy description of the one he uses; available on request. Send self-addressed, stamped envelope and donation, if possible.

Community Environmental Council
109 East de la Guerra
Santa Barbara, CA 93101
(805) 962-2210
An environmental resource center similar to Institute for Local Self Reliance. As well as publishing Survival Times—a good energy-environment journal, they are involved in the community garden project, with preparations being made for a permanent outdoor environmental education center (La Mesa project) on a 3-acre site. "The center will combine environmentally sound building concepts, organic agriculture and alternative energy." Also working with local health officials on the installation of Clivus Multrum toilets. ($12 membership, 6$ students)

Solar Sustenance Project
Rt. 1, Box 107A
Santa Fe, NM 87501
Bill Yanda, Director
A design for an attached solar greenhouse (well insulated, with thermal storage capacities) that provides year-round food production and supplementary heat for rural low-income families in the high altitudes of Northern New Mexico. So inexpensive, attractive, easy to construct and maintain from indigenous materials that 11 experimental greenhouses have been completed at least 50 owner-built ones. . . . A perfect a.t. example! Write for a clear, detailed report (11 pages).
SECA (Service for Energy Conservation in Architecture)  
c/o Boston Architectural Center  
320 Newbury St.  
Boston, MA 02115  
24-hour a day clearinghouse phone line for energy conservation information relating to the industry that supports it. Acts as a referral service drawing on professional expertise.

Earth Covered Building for Energy Conservation Conference Proceedings. Write:  
Frank L. Moreland, Director  
Center for Energy Policy Studies  
Inst. of Urban Affairs  
Univ. of Texas at Arlington  
Arlington, TX 76019  
Covers life-cycle costs, finance and insurance implications, social and behavioral aspects, energy and material consumption patterns, aesthetics, interfaces with city networks, political and legal considerations, technical considerations, environmental impact, implementation strategies. This is the next item for your shelves after Mike Ohler’s Story on his $50 underground home in northern Idaho, and Royce LaNier’s book Geotechnology.

Regional Climate Analyses, published by the American Institute of Architects and House Beautiful periodically in the A.I.A. Bulletin from 1949 to 1952. Presently available from:  
Xerox University Microfilms  
300 N. Zeeb Rd.  
Ann Arbor, MI 48106  
$15 paperback, $5 microfilm  
This series of studies of the climate of 15 representative cities and regions of the country is the most useful single source of climate information available for building. It contains detailed graphic information on range of temperature, hours of sunshine, hot and cold days, degree days, clear and cloudy days, solar heat, sun height, hourly direction of the sun, wind direction and strength, precipitation, snow precipitation days, maximum rate of rainfall, relative humidity, and vapor pressures, as well as qualitative analysis of special architectural implications. Beautifully clear graphic presentation conveys immense amounts of information without having to burrow through volumes of tables, charts and graphs.

The A.I.A. and House Beautiful should be commended for having sponsored a pioneering study of this quality. If all our professions would make documents such as this, which make sensitive and technically correct action possible for large numbers of people, widely available at reasonable prices, they could contribute far more to our quality of life than their professional activities themselves.

The present price of Regional Climatic Analyses, however, is unreasonably high. Why pay $15 for it? You could Xerox the whole 200 pages yourself for $10, or the section on your region for 60¢. It only costs around 85¢ a copy to print a document this size, or only 6¢ for a single region. Xerox it yourself, or write the A.I.A. (1735 New York Ave., N.W., Washington, DC 20006) and request they come out with a reasonably priced edition.

An excellent technical analysis comparing the economic desirability of different combinations of adding additional insulation, storm windows, and weatherstripping to existing houses. The first study available which analyzes for a wide range of energy costs as well as climatic conditions. It also contains a model that can be used to calculate what combinations will give homeowners the greatest savings in investing different amounts of money in energy conservation measures for their homes.

Grassy Brook Village. Reprinted with permission from Grassy Brook Village, Inc.

Living Within Our Means, by Richard D. Blasiej and Philip M. Moriarty. Send $1 plus SASE to Grassy Brook Village RFD No. 2, Box 39 Newfane, VT 05345  
Subtitled "Towards the development of the small, self-contained community as a focus for ecologically-sound housing on a comprehensible, human scale," this is a practical and philosophical rationale for Grassy Brook Village, a proposed energy-aware & resource-conscious condominium in Brookline, Vt. A perceptive and powerful companion to Sharing Smaller Pies by Tom Bender, it questions whether “more is better” and asserts the worth of a new way, a clearer relationship of humanity and nature in which the link between what we do, how we live, and the consequences are re-established.

**COMINDEX**

THE COMINDEX INDEX, which follows, was sent to us by Bob Wallace. As long as I’ve known Bob, he’s been doing this list: It is in our in-process directory and, we feel, makes a good base for a periodic section on computers.

**Comindex**  
Bob Wallace  
P.O. Box 5415  
Seattle, WA 98105  

Design, networking, and services in the computer field. These machines can be a useful medium for community communications, can relieve some of the paperwork for alternative groups, and can be enjoyable as a hobby. Comindex is gathering information in these areas
Infact
1877 West Fourth Avenue
Vancouver, BC V6J 1M4
(604) 723-8310
Open: Mon-Fri, 10 a.m. - 4 p.m.
Registered society in Vancouver, British Columbia, Canada. Interested in community use of computers for information services, information processing and communication. Resources: two terminals, access to UBC computer (both temporary), community memory (program), computerized Directory of Social Services. Projects: The Learning Exchange, 1320 Commercial Dr.; Community Computer Services, 1877 W. 4th Ave. Key Words: mailing list, local data-base, information network, learning exchange, community memory, people's access, computer-utility, information retrieval.

The Computer in the Community, Report No. One, IIPS (Inter-Institutional Policy Simulator) and Community Information.
A report on a two-month demonstration of a computer-based, community information system held at the Vancouver Public Library, Mar/April 1974. A cooperative venture of the IIPS Project, City of Vancouver, Community Information Centre and the Vancouver Public Library. Key Words: social research, local data-base, information network, learning exchange, community memory, people's access, computer-utility, information network.

Jerry Barenholz
870 W. 19th Ave.
Vancouver, BC
(604) 873-2387
Building a computer language & graphics facility for artists, on a PDP-11/40. Hope to expand to video and music synthesis. Looking for contact with people sharing computer art fantasies or experience. Into computer-aided design, community memory, social research, education. Also associated with Infact.

Barry de Ville, Dymaxion Research Ltd.
Box 1053—Armdale
Halifax, Nova Scotia
(902) 429-3175
Research, design, and implement data systems with conviviality and integration in mind. Specialize in: cataloging and retrieval of visuals; social surveys; community consensus polling; and technology impact studies. Designs alternatives, offers hardware access, and provides totally integrated systems.

Robert Ellis Smith, Publisher
Privacy Journal
P.O. Box 8844
Washington, DC 20003
(202) 547-2865, 9-5:30 EDT
Privacy Journal publishes monthly 8-page newsletter on privacy and computer data collection; also provides research services on privacy/computers. $15 per year. Publisher: Robert Ellis Smith.

“A Practical, Low-Cost, Home/School Microcomputer System,” IEEE Magazine, 8/74

Computer
5855 Naples Plaza, Suite 301
Long Beach, CA 90803
This article, by Joe Weisbecker of RCA labs, describes a computer costing under $500 for home, recreational and educational use. Basic COSMAC-COSMAC microprocessor, 1K RAM, 16 pushbuttons, a TV set, and an audio cassette player. Applications include utility programs (such as a calculator), school drills, games and puzzles, and experimental/user programs (such as simulation, music, etc.). Lists about 85 such applications for cheap microcomputers. 11 pages, 88¢ from Comindex.

“Conference on Living/Learning Information Exchanges.”
Northwestern University
Computers and Teaching
2003 Sheridan Road
Evanston, IL 60201
(312) 492-5367
The conference was November 1973 and included conferencing via computer between Resource One in San Francisco and Northwestern. Paper is a list of participants (with addresses) and a printout of the on-line dialog. 22 pages, free from above, or $1.76 from Comindex.

MIT Community Dialog Project
Prof. Thomas B. Sheridan
MIT 1-108
Cambridge, MA 02139
(617) 253-2228
This project studies the facilitation of group meetings using electronic voting aids and other procedures. It evaluates this technique as a function of the topic, participants, and moderator of the group. Also into cable-TV citizen participation. 43 pages; from Prof. Sheridan or $3.44 from Comindex.

continued on page 10
COMINDEX continued from page 9

Peter and Trudy Johnson-Lenz
2222 S.E. Nehalem Street
Portland, Oregon 97202
(503) 232-8976

Consulting in the areas of data and information processing, computer and cybernetic systems design and analysis, and statistical analysis. Current areas of work: feedback ballotting, simulation/gaming with or without computers, skill banks, computer models (dynamic, energetic, econometric, cellular, etc.), design of large-scale systems to promote citizen involvement and participation. We have a 10/30 cps CRT terminal and use several commercial and public time-sharing services. We need to keep up with what other people are doing, and find outlets for our talents and experience.

Carl C. Clark
Commission for the Advancement of Public Interest Organizations
1875 Connecticut Ave., N.W.
Washington, DC 20009
(202) 462-0505

Operates "Information Resources for Public Interest," an on-line information system available on National CSS and periodically printed in book form ($10). Also does "Public Interest Reference Library" and "Citizens' Drinking Water Coalition."

Bill Smith
808 University Blvd., Apt. 2
Silver Spring, MD 20903

Offers windplant design service. Computer program and sample output for stamped, addressed envelope; windplant design for $5 and 7 variables (such as mean wind speed, power needed, etc.)

The Computer Hobbyist
Box 295
Cary, NC 27511
(919) 467-3145 evenings
(919) 851-7223 evenings


The Digital Group
P.O. Box 6528
Denver, CO 80209

Active amateur computer group. Monthly newsletter, $12/year. Into hardware/software support for 8008 and 8080 systems: plans for cassette, CRT, calculator, Mark-8 modifications, 1K operating system, ham radio support. Some boards and kits. Classified ads. Excellent info.

Micro-8 Computer User Group Newsletter (Hal Singer, ed.)
Cabrillo Computer Center
4350 Constellation Road
Lompoc, CA 93436
(805) 733-3501 (1:45-4:30 PST)
(805) 735-1596 (evenings)

Newsletter, subscriber information exchange. $6 for 6 issues. New product news, circuits and ideas from subscribers, survey articles, standardization of 8008 interfaces, kit evaluations and many other things. Very good.

LCG Engineering
1807 Delaware St.
Berkeley, CA 94703

Lee Felsenstein and Efrim Lipkin are working toward helping people use computers. Lee is working on the "Tom Swift Terminal," a modular, convivial, bus-oriented CRT terminal (description, $0). Efrim is actively developing the Community Memory public data base. LCG also publishes the Journal of Communication, dealing with community memory and public access, for $1/issue.

People's Computer Company
P.O. Box 310
Menlo Park, CA 94025

Publishes an excellent newsletter covering educational computer use (including reviews of DEC and HP systems), game programs in BASIC, microcomputer kits and news, and general computer hobbyist topics. $5/year (5 issues).

Amateur Computer Society Newsletter
P.O. Box 2107
Darien, CT 06820

For people building their own digital computer. Short notes on kits, surplus parts, swaps, letters, etc. More on surplus computer conversion and building from scratch. $5 for at least 8 issues; comes out every 2 or 3 months. 34+ back issues available. 6 pages per issue.

Byte
Carl Helmers, Editor
Box 378
Belmont, MA 02178

Subscriptions:
c/o Green Publishing Inc.
Peterborough, NH 03458

This is a new magazine, edited by Carl Helmers, who previously did the Experimenters' Computer System, a newsletter containing plans for an 8008 system (may still be available). Will cover the computer hobbyist field: projects, surplus equipment, games, practical applications, tutorials, etc. $12/year.

The Logic Press
260 Godwin Ave.
Wyckoff, NJ 07481

Publishes Logic Newsletter, Robotics, and other newsletters (sample issues $1, L.N. $9 for 10 issues). Covers logical design and applications, formal logic, microprocessor news, book reviews, etc. General in scope; not much specific microprocessor circuitry.

Homebrew Computer Club
Fred Moore, newsletter editor
558 Santa Cruz Ave.
Menlo Park, CA 94025

Bay area computer builder's club. Into community memory and computers helping people, as well as technical ideas and circuits. Test equipment and design help available. Send a dollar to get the newsletter.

Popular Computing
Box 272
Calabasas, CA 91302

Monthly covering computing theory, number theory, calculators, the "art of computing," other mathematical articles. $15/year; back issues $2 each or 2 for $3.

Creative Computing
Ideametrics
P.O. Box 789-M
Morristown, NJ 07960

Bi-monthly; subscriptions: institutional $15/yr; individual, $8/yr; student, $6/yr. Into educational and recreational computing: games, computers and society, mathematics, humor, computer aided instruction, tutorial articles, graphics, more. 48 pages, back issues $1.50.

CONDUIT/Pipeline
P.O. Box 388
Iowa City, IA 52240

Professional journal (free; NSF funded) covering educational uses of computers and investigating the transfer of educational materials from school to school. University oriented.

Computer Lib/Dream Machines
Hugo's Book Service
Box 2622
Chicago, IL 60690

This large-format book is by Ted Nelson, listed separately. Half of it explains the basics of computers, ranging widely from how they work, what they can do, what languages and data structures are, to computer myths and games. The flip side describes many state-of-the-art systems in areas such as video synthesis, non-linear text data structures, artificial intelligence, graphic displays, and others. 128 pages, 10”x14”, $7.00. Brochure, maybe free from Hugo's, 30¢ from Comindex.

Note: The OMSI Community Resource Center and Software development group is not listed; we will be writing up a full description in upcoming issue.
ENERGY

GENERAL

The Dos and Don’ts of Methane, by Al Rutan, available from:
Juicy Press
1809 Portland Ave.
Minneapolis, MN 55404
A good, basic methane primer to be read along with Methane Digesters for Fuel Gas & Fertilizer, which contains more technical data. Al’s book would be especially useful in familiarizing someone with all the work necessary in digester construction. New ideas on scum removal, heating, mixing.

Cold Regions Experiments with Anaerobic Digestion for Small Farms and Homesteads, by George Oberst.
Biofuels
Box 609
Nixon, MT 59853
Inquire on price. You should read Methane Digesters first, then this. More on the capital costs for meaningful gas production, suggested that the pollution control and fertilizer value be included along with gas production.

The Energy Problem: A Sensible Solution for Right Now, by the National Oil Fuel Institute, available free from:
NOFI
60 East 42nd St.
New York, NY 10017
Advocates “avoiding the expense and risk of a crash nuclear program” by “practical, attainable conservation” and “prompt, environmentally safe domestic energy development.” NOFI is composed of thousands of independent oil dealers who supply 70% of the oil used in American homes and businesses. The Institute states that their program of conservation and safe domestic energy research & development “will cost a tiny fraction of a nuclear program” and that “we must not commit all our time and money to a hoped-for nuclear solution so costly that we must forego all other alternatives.”


Energy Alternatives is 704 pages thoroughly describing existing and emerging energy technologies and resource systems, their environmental impact, their efficiencies and their costs. Covers geothermal, organic waste conversion and solar energy, as well as conventional technologies. Good section on energy consumption and conservation. An example of a project, its environmental impact and a comparison of the project to other alternatives is provided. The first excellent basic reference document to include Howard T. Odum’s energetics or net energy analysis (ch. 15—“Proceedures for Comparing the Energy Efficiencies of Energy Alternatives”); it also mentions the groundbreaking information provided by Transition, the Oregon Energy Study (appendix to ch. 15).

MERES (Matrix of Environmental Residuals for Energy Systems) is a computerized database specifying the water pollution, air pollution, solid waste, land use and occupational health effects of present and future energy systems. The 15-pg. summary clarifies its use and availability.

Energy Extension Service (EES)
Plans are now being formulated by ERDA to establish a system through which the public will be informed of new energy technologies developed by ERDA. Patterned after the Agricultural Extension Service, EES would provide expertise, information, consultation & receive advice on the nature of energy use and related problems by sponsoring short courses, workshops, conferences, specialized publications. Information would be provided to individuals, businesses and local and state governments, primarily on new energy conservation techniques and alternative energy systems. For details, write EES, ERDA, Washington, D.C. 20545. (From Sept. 15, 1975, Government R&D Report, $80/year for 22 issues, P.O. Box 284, MIT Station, Cambridge, MA 02139)

The Basic Layout of the Hydraulic Ram
Skookum Columbia Hydraulic Rams, used to irrigate, pump domestic or municipal water supplies, are available for $297 (1" drive pipe, 100-2100 gal. per day capacity) to $760 (3" drive, 700-20,000 gpd) from the Skookum Co., which also manufactures logging equipment. Although repair is rarely necessary, since most rams are simply and ruggedly made, Skookum maintains a complete line of spare parts, which are shipped air mail for installation by your local machine shop. For free brochure explaining how a ram works, how to figure size needed and capacity of water that can be pumped, write

Rick Gustafson, The Skookum Co.
8524 N. Crawford
Portland, OR 97203
(503) 286-3627

Southern Oregon Alternative Energy Exchange now in formation. For details, contact Chuck James, Rt. 1, Box 7, Jacksonville, OR 97530.

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Energy General
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Information from ERDA: Weekly Announcements, available free from:
U.S. Energy Research & Development Administration
Washington, D.C. 20545
Covers everything done in any connection with ERDA: reports, conferences, RFPs (requests for proposals), contract awards in energy conservation, energy generation, conversion, transmission and use; in solar, wind, nuclear, coal, oil, transportation, storage, geothermal fusion.

Ventilation Shaft in Pakistan House

Energy Conservation and Economic Growth—Are They Incompatible?
$1 from:
The Conference Board Record
Box 908, FDR Station
New York, NY 10022
The Board, a non-profit business research organization, concludes that a substantial degree of energy conservation is attainable within the U.S. goal without ill economic effects.

Oregon State University Press
P.O. Box 689
Corvallis, OR 97330
A hidden treasure for those who wonder at the work of natural systems. All the heavies are here: Eugene P. Odum (“energetic” Howard’s brother) explaining energy flow circuits and budgets in ecosystem development and their relevance to human affairs such as land use planning; the Hubbard Brook Experimental Forest starting itself with Likens & Bormann interpreting its complex workings under the stresses of clear cutting; Frank Golley on “Energy Flux in Ecosystems” describes the factors which may set limits to energy production. Full of useful diagrams, tables and graphs. Amazing what we knew in 1970.

Technical Information Center
Oak Ridge Operations Office, ERDA
Box 62
Oak Ridge, TN 37830


“If we don’t get off the exponential growth curve, the year 2000 could unfold on a U.S. landscape dotted with 5000 1000-MW fossil and nuclear power plants. A previous price will have been paid: capital costs $24 billion; water for condenser cooling—more than 2/3 the total runoff of our major rivers; and the ecological impact—a possible disastrous climatic effect resulting from the massive heat flux. A far more vigorous conservation effort is needed until solar energy, sea thermal, or another self-renewing system—virtually pollution-free of heat, gaseous and particulate matter—becomes commercially feasible.”

Johns Hopkins Rd.
Laurel, MD 20810
Extensive diagrams, illustrations, schematic and reports on OTEC and attending technologies, including flywheel storage, power transmission and thermal gradient maps of U.S. waters. Does anyone know what happens to Great Britain if we suck heat from the warm Gulf Stream? Or the Newfoundland fisheries?

Energy and Food: Energy Used in Production, Processing, Delivery and Marketing of Selected Food Items, by Frisch, Dujack & Jimerson, CSPI
Energy Series VI, June 1975, from:
Center for Science in the Public Interest
1776 Church St. N.W.
Washington, DC 20036
More numbers on the energy inherent in different foods at each step in their route to our dinner tables. A basic reference in this area as well as a primer on energy-intensive agriculture and on ways to reduce energy consumption while keeping high nutrition standards.

Energy: The Power of the States, 237 pp., write:
Jan L. Mills, Director
Center for Governmental Responsibility
Holland Law Center, U. of Fla.
Gainesville, FL
(904) 392-2257
Prepared for the Fla. Energy Committee, deals with federal and state authority in the energy area, various phases of energy control: exploration, leasing, production of energy, and processing and conversion of natural resources. This plus publications by the Council of State Governments would be useful to the energy-aware legislator.

The fuel reserve estimates continue to drop: the U.S. Geological Survey now says that there is 80% less oil available than previously estimated off the Atlantic Coast. Meanwhile, in California, a bill has passed the legislature and been signed by Governor Brown which effectively delays leasing oil lands for drilling off the California coast for a few more years by banning construction of new oil pipelines across state-owned tidelands till 1978. (Source: Not Man Apart, mid-September, 1975)

“Delphi Analysis of Energy Costs” is being conducted by:
Prof. James R. Albers
Systems/Simulations
Huxley College of Environmental Studies
530 Old Main
Western Wash. State College
Bellingham, WA 98225
Write if you wish to participate. Deadline for first round is Nov. 1, with the first return to all participants approx. mid-November.

Tchubt, American Committee for Cape Verde
Rm. 416
14 Beacon St.
Boston, MA 02108
Starting a library on appropriate, renewable energy sources such as solar and wind. Send 3 of everything to R. Michael Frenchman (one for files in Boston, one for Cape Verde files and one for United Nations files).

Energy Technology II—Proceedings, 2nd Energy Technology Conference. $14.95 from:
Government Institutes, Inc.
4733 Bethesda Ave.
Bethesda, MD 20014
343 pp., June 1975. Covers fossil, nuclear, international activities, conservation, storage and transmission, solar energy, policy and legislation, and includes a list of attendees.
NUCLEAR

Fast Breeder Reactor Report. Available for $1 from:
U.S. General Accounting Office
Distribution Office
Box 1020
Washington, D.C. 20013

Copies of the July 30, 1975 GAO report on the fast breeder reactor. Check or money orders only. (Exact title not known at press time.) Cost overruns, etc.

Light Water Breeder Reactor Program
Draft Environmental Impact Statement.
4 vols., 2500 pp., is being distributed by ERDA. In order to be considered in the preparation of the final statement, comments on the draft statement must be submitted by Oct. 14, 1975, to W.H. Pennington, Office of the Asst. Administrator, Environment and Safety, Mail Station E-201, U.S. ERDA, Washington, D.C. 20545. Single copies of the draft statement are available from the same address for those who wish to review and comment on the document. For more details, see ERDA Announcements for week ending Aug. 20, 1975.

SOLAR

Groupe de Travail Héliotechnique
Information Hélio
25, Rue du Commerce
75015 Paris, France

Has a publication listing addresses, bibliographies, project and reports on group activities. (Hélio = Sun)

"SKYLID," reprinted with permission from Zomeworks.

Sunspots: Collected Facts and Solar Fiction, by Steve Baer, $3.00 postpaid from:
Zomeworks Press
P.O. Box 712
Albuquerque, NM 87103

Absolutely great! Solar humor, workable fantasies open up your brain cells, hard science is applied with a friendly Mr. Wizard "watch this now, my friends" touch. Subtly educational passages by an inventor-philosopher who has listened to the questions and his own head are interspersed with smile-provoking "old-timer" witticisms aimed at our expensive energy establishment. A gas to read, bound to be a word-of-mouth best seller.

Energy Conservation and Solar Retrofitting for Existing Buildings, by students of J.S. Reynolds, 122 pp., 1975. $3 from:
The Center for Environmental Studies
School of Architecture
University of Oregon
Eugene, OR 97403

Contains basic numbers (U, R, BTU/s.f./hr. for different building materials, insulation) and principles (design with climate, human comfort zones, energy flow through a home and solar energy basics) that would enable a concerned homeowner to estimate his/her home energy needs and clearly communicate with an architect/builder/insulation contractor. Very useful examples of how to calculate heat loss, done for 7 existing residences in Eugene area. A highly recommended companion to Prof. Reynolds' Solar Energy for Pacific NW Buildings. Ask for free solar energy publications list.


This very important article outlines the difficulties which hinder the delivery of solar technology, and where and how incentives can be best applied to stimulate public use of solar energy. Ezra's perceptive comments were used by ERDA in the formulation of the Solar Energy National Plan. Although aimed at federal level policy, the ideas are applicable at any level and local agencies, public and private, should use it as a guideline to speeding the transition to solar energy, particularly banking and lending institutions. Continued on page 14.
ENERGY-Solar
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Soap Lake Community Newsletter, free with SASE from:
Greg Higgins, Project Manager
Soap Lake Solar Community
502 E. Main Ave.
Soap Lake, WA 98851

Solar heating for individual homes and centralized thermal electric systems for large scale generation are presently receiving much attention. Between these extremes lies the effort at Soap Lake and all other solar community concepts such as Grassy Brook Village in Vermont and the new solar suburbs of Southern California. Includes estimates, based on ERDA, HUD and NASA data, of a $35 million yearly solar equipment market by 1985 with 7000 new solar units per year and a sketch of a proposed environmental monitoring station designed by Project Associates and Northwest sculptors Lee Kelly and David Cotter.

Sunpaper, by the New Mexico Solar Energy Association. $1 per copy
c/o Architects, Taos
P.O. Box 1884
Taos, NM 87571
First issue of 500 member plus NMSEA (write Susan Yanda, Rt. 1, Box 107AA, Santa Fe, NM 87501 for new member information). Contains an ERDA-funded study on design of air-cooled collector/rock-bin storage solar heating systems, N.M. solar legislation details and another of Steve Baer's solar tales, this one on what Peter Van Dresser calls "The Clotheline Paradox," and reprinted below.

Survey of Solar Energy Products & Services—May 1975, available from:
Assistant Public Printer
Supt. of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Proceedings of the Southeastern Conference on Application of Solar Energy will be available in late October. Write:
James Babington
Univ. of Alabama Press
Division of Continuing Education
P.O. Box 1247
Huntsville, AL 35807

U.S. Solar Radiation Data. Write:
Grady McKay, Chief
ADP Services Division
Environmental Data Service—NOAA
National Climatic Center
Federal Building
Asheville, NC 28801

Data from 60 stations across the nation is available on either an hourly or daily format on magnetic tape, punched cards or listing from the tape. Write above for free reference manuals on hourly (CD-280) or daily (CD-480) data and information on ordering. The manuals contain maps, suitable for framing, locating each station.

Graphic Projection of a Sun Path Diagram
Solar Energy Research Institute
ERDA will release guidelines and site-selection criteria in October for a SERI. Parties interested in proposing sites for the facility will have 45 days to submit proposals. ERDA expects that a site will be chosen early in 1976. At present, it is rumored that Arizona is the prime candidate. However, Congressional pressure will be intense, and ERDA may decide to please the largest number of Congressmen by establishing multiple institutes in a number of states. Academic and state organizations interested in securing the Solar Institute within their domains should ensure they receive a copy of the guidelines and criteria by contacting Ben E. McCarty, Public Information Office, ERDA, Washington, D.C. ph. (301) 973-3335.

MITRE Air Solar Heating & Cooling Systems Report, inquire as to availability and price to:
MITRE Corp.
Westgate Research Park
McLean, VA 22110

A research study done for the Sheet Metal Workers International Association finds Solar HVAC systems using air rather than water have lower initial cost, lower maintenance costs, lighter weight, no freezing, leakage or corrosion problems, and greater simplicity and ruggedness. (From Sept. 1975 Advanced Solar Energy Technology Newsletter, $60/year for 12 issues, 1609 W. Windross, Phoenix, AZ 85029)

Tilly's Catch-A-Sunbeam Coloring Book: The Story of Solar Heat Even Growups Can Understand, by Tilly Speergang, illus. by Malcolm Wells, arch., $1.50 each (80¢ each for 50 or more) from:
Solar Service Corp.
306 Cranford Rd.
Cherry Hill, NJ 08003

A funny, yet highly educational book on solar energy for children 4 to 14. Lovely. Now all we need is one each on energy conservation, wind power, gardening, recycling and ? and we'll all make it into the next century safely. What did you put in the blank? Maybe we can find it and tell you about it next issue.

Additional Solar Manufacturers [see RAIN #9]:
Solar Research, 525 N. 5th St., Brighton, MI 48116, (313) 227-1515: 2nd solar components catalog now available. (Edward W. Bottom)

Solar Energy Services, P.O. Box 2166, Hendersonville, NC 28739, (704) 692-8762: custom engineering of commercial, industrial and residential solar water heating and building heating and cooling; solar energy education and technical short courses. (Helen P. Bird)


Chamberlain Corp., Solar Division, 845 Larch Ave., Elmhurst, IL 60126, (312) 279-3600: flat-plate collectors for heating and cooling. (Allen J. Vancura)


Heliotrope General, 1869 Hidden Mesa Rd., El Cajon, CA 92020, (714) 444-6174: Delta-T differential temperature thermostat for solar heating and solar hot water system control; Storex 40 and 65 gal. hot water storage tanks with built-in 20 sq. ft. copper heat exchanger and optional supplemental electric resistance heating.

WIND

1975 Wind Energy Conversion Systems Workshop Proceedings, now available for $10 from:
The MITRE Corp.
Mail Stop W210
Westgate Research Park
McLean, VA 22110

A plan is outlined according to which solar and wind energy would supply Denmark's needs by the year 2050. These are the first steps to be taken in developing a regional renewable energy system. Biomass and ocean thermal gradient surveys added to this and then overlaying all the data on maps à la McTarg would probably give planners and industrial park developers some idea about where to put what, depending on the type of energy needed (fuel, heat, electricity) and the availability of a renewable supply/storage.

Public Reaction to Windmills studied in five areas from coast to coast by the Survey Research Lab at the Univ. of Illinois. Contact Prof. Robert Ferber for details of this $147,800 study funded by ERDA and NSF.

Wind Power Public Stock Offering: Write American Wind Turbine Co. 1016 E. Airport Rd. Stillwater, OK 74074 (405) 377-5333

**ENVIRONMENT**

Oregon 1975 Legislature: A future ban on fluorocarbon-propelled aerosols, an adequate LCDC budget, and scenic river designation for a section of the Clackamas River rank as the best achievements for the environment. The Oregon Energy Office was formed (a realignment of the old Energy Conservation & Allocation Office). Environmentalists feel they lost ground in: the extension of the field burning cut-off date; loosening of septic tank rules; exemptions from noise rules. HB 2202 exempts from real property taxation the cost of a solar heating system. SB 283 created a 7-member energy conservation board within the Dept. of Commerce to adopt rules to promote maximum energy conservation in design, construction and repair of buildings. HB 2036: Adds solar energy to land use planning considerations. Permits county planning commissions and city councils to provide solar energy incentives in zoning and building setback ordinances to use of incident solar energy. For more detailed information on the Oregon legislative action, get copies of Earthwatch Oregon, June/July issue (500), Oregon Environmental Council, 2637 S.W. Water, Portland, OR, 97201, and: Oregon Voter Digest, August 1 issue, $1.50, 108 N.W. 9th, Portland, OR 97209.


One of the good public research groups watching corporate practices. Have several reports/studies on: economic impact of the cost of pollution control; overview of social performances of various corporations. Write for publications list and membership/newsletter information.

What Makes Education Environmental? McInnis & Albrecht, editors, Data Courier Inc. & Environmental Educators, Inc., Louisville, KY 1975, 470 pp. $9.95. Probably when asked for a book to introduce teachers to the range of Environmental education methods, history/background, definitions and theories. I'll refer them to this one. Felt rather overloaded (odd thing for a rain maker to say); maybe just cause of the amount of words and few illustrations. They have some of the best articles I've seen appear over the last couple of years in various environmental magazines.


As William Ruckelshaus says in the introduction: "In order for a citizen to meaningfully participate in government decision-making, he or she must be informed and must have access to decision-makers. This book imaginatively addresses both needs. It places great emphasis on the responsibility of a citizen to become knowledgeable prior to meaningful participation." Introductory material chapters; especially good ones on researching; lots of follow up access; a good guide for volunteer, citizen action groups.

Water Newsletter Oregon Environmental Council 2637 S.W. Water Ave. Portland, OR 97201

OEC and Oregon Cleanwater Project have received grants from EPA for newsletters on water pollution control; to encourage citizen participation in water quality activities. Write to be put on the mailing list.
Only the rich can have a good life. This is the daunting message that has been drummed into the ears of all humankind during the last half-century or so. It is the implicit doctrine of "development;" the growth of income serves as the very criterion of progress. Everyone, it is held, has not only the right but the duty to become rich, and this applies to societies even more stringently than to individuals. The most succinct and most relevant indicator of a country's status in the world is thought to be the average income per head, while the prime object of admiration is not the level already attained, but the current rate of growth.

It follows logically—or so it seems—that the greatest obstacle to progress is a growth of population: it frustrates, diminishes, offsets what the growth of Gross National Product (GNP) would otherwise achieve. What is the point of, let us say, doubling GNP over a period if population is also allowed to double during the same time? It would mean running fast merely to stand still: average income per head would remain stationary, and there would be no advance at all towards the cherished goal of universal affluence.

In the light of this received doctrine, the well-nigh unanimous prediction of the demographers—that world population, barring unforeseen catastrophes, will double during the next thirty years—is taken as an intolerable threat. What other prospect is this than one of limitless frustration?

Poverty is not misery

To make my meaning clear, let me state right away that there are degrees of poverty which may be totally inimical to any kind of culture in the ordinarily accepted sense. They are essentially different from "poverty" and deserve a separate name; the term that offers itself is misery. We may say that poverty prevails when people have enough to keep body and soul together but little to spare, whereas in misery they cannot keep body and soul together, and even the soul suffers deprivation. Some thirteen years ago, when I began seriously to grope for answers to these perplexing questions, I wrote this in "Roots of Economic Growth."**

"All peoples—with exceptions that merely prove the rule—have always known how to help themselves, they have always discovered a pattern of living which fitted their peculiar natural surroundings. Societies and cultures have collapsed when they deserted their own pattern and fell into decadence, but even then, unless devastated by war, the people normally continued to provide for themselves, with something to spare for higher things. Why not now, in so many parts of the world? I am not speaking of ordinary poverty, but of actual and acute misery; not of the poor, who, according to the universal tradition of mankind, are in a special way blessed, but of the miserable and degraded ones who, by the same tradition, should not exist at all and should be helped by all. Poverty may have been the rule in the past, but misery was not. Poor

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"In anpoetical English: "Even as a child I felt terror-struck when I heard it said that to live an agreeable life you have got to be rich."

peasants and artisans have existed from time immemorial; but miserable and destitute villagers in their thousands and urban pavement dwellers in their hundreds of thousands—not in wartime or as an aftermath of war, but in the midst of peace and as a seemingly permanent feature—that is a monstrous and scandalous thing which is altogether abnormal in the history of mankind. We cannot be satisfied with the snap answer that this is due to population pressure.

"Since every mouth that comes into the world is also endowed with a pair of hands, population pressure could serve as an explanation only if it meant an absolute shortage of land—and although that situation may arise in the future, it decidedly has not arrived today (a few islands excepted). It cannot be argued that population increase as such must produce increasing poverty because the additional pairs of hands could not be endowed with the capital they needed to help themselves. Millions of people have started without capital and have shown that a pair of hands can provide not only the income but also the durable goods, i.e., capital, for civilised existence. So the question stands and demands an answer. What has gone wrong? Why cannot these people help themselves?"

The answer, I suggest, lies in the abandonment of their indigenous “culture of poverty,” which means not only that they lost true culture, but also that their poverty, in all too many cases, has turned into misery.

The cost of the ephemeral and the eternal

A “culture of poverty” such as we have known in innumerable variants before the industrial age is based on one fundamental distinction—which may have been made consciously or instinctively, it does not matter—the distinction between the “ephemeral” and the “eternal.” All religions, of course, deal with this distinction, suggesting that the ephemeral is relatively unreal and only the eternal is real. On the material plane we deal with goods and services, and the same distinction applies: all goods and services can be arranged, as it were, on a scale which extends from the ephemeral to the eternal. Needless to say, neither of these terms may be taken in an absolute sense (because there is nothing absolute on the material plane), although there may well be something absolute in the maker’s intention: he/she may see his/her product as something to be used up, to be destroyed in the act of consumption; or as something to be used or enjoyed as a permanent asset, ideally forever.

The extremes are easily recognised. An article of consumption, like a loaf of bread, is intended to be used up; while a work of art, like the Mona Lisa, is intended to be there forever. Transport services to take a tourist on holiday are intended to be used up and therefore ephemeral; while a bridge across the river is intended to be a permanent facility. Entertainment is intended to be ephemeral; while education (in the fullest sense) is intended to be eternal.

Between the extremes of the ephemeral and the eternal, there extends a vast range of goods and services with regard to which the producer may exercise a certain degree of choice: he/she may be producing with the intention of supplying something relatively ephemeral or something relatively eternal. A publisher, for instance, may produce a book with the intention that it should be purchased, read, and treasured by countless generations; or the intention may be that it should be purchased, read, and thrown away as quickly as possible.

Ephemeral goods are—to use the language of business—“depreciating assets” and have to be “written off.” Eternal goods, on the other hand, are never “depreciated” but “maintained.” (You don’t depreciate the Taj Mahal; you try to maintain its splendour for all time.)

Ephemeral goods are subject to the economic calculus. Their only value lies in being used up, and it is necessary to ensure that their cost of production does not exceed the benefit derived from destroying them. But eternal goods are not intended for destruction: so there is no occasion for an economic calculus, because the benefit—the product of annual value and time—is infinite and therefore incalculable.

Once we recognise the validity of the distinction between the ephemeral and the eternal, we are able to distinguish, in principle, between two different types of “standard of living.” Two societies may have the same volume of production and the same income per head of population, but the quality of life or life-style may show fundamental and incomparable differences: the one placing its main emphasis on ephemeral satisfactions and the other devoting itself primarily to the creation of eternal values. In the former there may be opulent living in terms of ephemeral goods and starvation in terms of eternal goods—eating, drinking, and wallowing in entertainment, in sordid, ugly, mean, and unhealthy surroundings—while in the latter, there may be frugal living in terms of ephemeral goods and opulence in terms of eternal goods—modest, simple, and healthy consumption in a noble setting. In terms of conventional economic accounting, they are both equally rich, equally developed—which merely goes to show that the purely quantitative approach misses the point.

The study of these two models can surely teach us a great deal. It is clear, however, that the question: “Which of the two is better?” reaches far beyond the economic calculus, since quality cannot be calculated.

No one, I suppose, would wish to deny that the life-style of modern industrial society is one that places primary emphasis on ephemeral satisfactions and is characterised by a gross neglect of eternal goods. Under certain imminent compulsions, moreover, modern industrial society is engaged in a process of what might be called “ever-increasing ephemeralisation;” that is to say, goods and services which by their very nature belong to the eternal side are being produced as if their purpose were ephemeral. The economic calculus is applied everywhere, even at the cost of skimping and cheese-paring on goods which should last forever. At the same time, purely ephemeral goods are produced to standards of refinement, elaboration, and luxury, as if they were meant to serve eternal purposes and to last for all time.

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Nor, I suppose, would anyone wish to deny that many preindustrial societies have been able to create superlative cultures by placing their emphasis in the exactly opposite way. The greatest part of the modern world's cultural heritage stems from these societies. The affluent societies of today make such exorbitant demands on the world's resources, create ecological dangers of such intensity, and produce such a high level of neurosis among their populations that they cannot possibly serve as a model to be imitated by those two-thirds or three-quarters of mankind who are conventionally considered under-developed or developing. The failure of modern affluence—which seems obvious enough, although it is by no means freely admitted by people of a purely materialistic outlook—cannot be attributed to affluence as such, but is directly due to mistaken priorities (the cause of which cannot be discussed here): a gross over-emphasis on the ephemeral and a brutal under­valuation of the eternal. Not surprisingly, no amount of indulgence on the ephemeral side can compensate for starvation on the eternal side.

Reducing wants to needs
In the light of these considerations, it is not difficult to understand the meaning and feasibility of a culture of poverty. It would be based on the insight that the real needs of human beings are limited and must be met, but that their wants tend to be unlimited, cannot be met, and must be resisted with the utmost determination. Only by a reduction of wants to needs can resources for genuine progress be freed. The required resources cannot be found from foreign aid; they cannot be mobilised via the technology of the affluent society which is immensely capital-intensive and labour-saving and is dependent on an elaborate infra-structure which is itself enormously expensive. Uncritical technology transfer from the rich societies to the poor cannot but transfer into poor societies a life-style which, placing primary emphasis on ephemeral satisfactions, may suit the taste of small, rich minorities, but condemns the great, poor majority to increasing misery.

The resources for genuine progress can be found only by a life-style which emphasises frugal living in terms of ephemeral goods. Only such a life-style can create, maintain and develop an ever-increasing supply of eternal goods.

Frugal living in terms of ephemeral goods means a dogged adherence to simplicity, a conscious avoidance of any unnecessary elaborations, and a magnanimous rejection of luxury—puritanism, if you like—on the ephemeral side. This makes it possible to enjoy a high standard of living on the eternal side, as a compensation and reward. Luxury and refinement have their proper place and function, but only with eternal, not ephemeral goods. That is the essence of a culture of poverty.

One further point has to be added: the ultimate resource of any society is its labour power, which is infinitely creative. When the primary emphasis is on ephemeral goods, there is an automatic preference for mass-production, and there can be no doubt that mass production is more congenial to machines than it is to people. The result is the progressive elimination of the human factor from the productive process. For a poor society, this means that its ultimate resource cannot be properly used; its creativity remains largely untapped. This is why Gandhi, with unerring instinct, insisted that "it is not mass production but only production by the masses that can do the trick." A society that places its primary emphasis on eternal goods will automatically prefer production by the masses to mass production, because such goods, intended to last, must fit the precise conditions of their place: they cannot be standardised. This brings the whole human being back into the productive process, and it then emerges that even ephemeral goods (without which human existence is obviously impossible) are far more efficient and economical when a proper "fit" has been ensured by the human factor.

All the above does not claim to be more than an assembly of a few preliminary indications. I entertain the hope that, in view of increasing threats to the very survival of culture—and even life itself—there will be an upsurge of serious study of the possibilities of a culture of poverty. We might find that we have nothing to lose and a world to gain.

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LAND USE

In 1972, the City of Petaluma, Calif., passed an ordinance limiting housing projects (of 5 or more units) to a total of 500 dwellings per year through 1977. And the town endorsed the growth-control ordinance by a vote of 4,181 to 906. The homebuilders associations screamed, and the courts at first agreed with them. But in August, the Appeals Court reversed that decision in favor of the citizens...a real landmark for communities worried about controlling the quality and nature of their growth. For details, see the mid-September issue of Not Man Apart.

A Time to Plan, published by: Planning Association of Washington American Institute of Planners & Evergreen Environmental Resource Center P.O. Box 280 Cheney, WA 99004

A collection of articles prepared to give land planners a sense of the place of energy in land use strategies; as well as the need for, and how to involve citizens in, the planning. Available from above.


Dept. of Urban Planning University of Oregon Eugene, OR 97403

$2.00


MEDIA

Public Media Center
2751 Hyde St.
San Francisco, CA 94109

A public interest advertising group, producing imaginative TV/radio public service spots. I've heard the latest spots on growth (we can't grow on like this) are especially good, introduced to the public by Tom McCall. Prices quite reasonable. They also help groups generally with media access and have a handbook on the subject.

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NOTES FROM EUGENE

Notes from Eugene, Brian Livingston

Dear Steve:

Thanks for your latest bundle of stuff, most of which was new to me. Your packet, in response to my packet, has inspired me to create still another packet. . . . After returning from Olympia (The NW Media Conference), I stayed up until 5 that morning sorting piles of info I'd accumulated over the past year. Especially since Olympia, my room was beginning to look as though it were inhabited by a mad Xerox copier. Everything got into a much handier alpha file, except for the Bend in the River stuff (who?) which I still don't quite have the nerve to index, so it sits in a pile 15” high in one corner.

Builder's Co-op
3328 Elmira Rd.
Eugene, OR 97402
688-7096
Non-profit group willing to help others with low-cost structures.

Community Health & Education Center
1559 W. 5th
Eugene, OR 97402
343-4078
Carol Dunning (formerly of Ashland Women's Health) is director of this project, which has just elected its first full board of directors, and is in the grant-writing stage. Proposes traditional and alternative methods working hand-in-hand.

Eugene-Springfield Tenants Union
Box 382
Eugene, OR 97401
344-RENT
This group, an outgrowth of UO Housing Dept., has had some success combating summary evictions by bringing publicity on involved landlords.

Medium/Rare Video
107 Cross Place
Eugene, OR 97404
345-4554
Relatively new address. Tripp Micich and others—experienced in all aspects of video production. Produced Oregon Renaissance Faire tape, etc.

OUR Federal Credit Union
380 W. 8th
Eugene, OR 97401
485-1188
Set up by OEO several years ago, the credit union has survived the demise of the parent body nicely. They currently have assets over $100,000, still cannot afford to pay members any interest, though. Besides loans, membership includes discounts on auto insurance, tires, etc.

People's Law School
1547 Lexington
Eugene, OR 97403
747-693
Jill Hyman
Legal Connections
686-3829
PLS conducts classes on various aspects of law and society. Legal Connections, sponsored by UO Law School, is a telephone referral service to free legal assistance (beyond merely Legal Aid). Groups have overlapping membership.

Saturday Market
Box 427
Eugene, OR 97401
686-8885, Th-Fri
Operates both Sat. and Sun. now.

Starflower Co.
385 Lawrence
Eugene, OR 97401
686-2151
Natural foods distributing collective; should take on a more major role since the demise of Alternative Distributing Co. of Seattle. Primary source of rennetless (meatless) cheese products.

Switchboard
Box 905
454 Willamette
Eugene, OR 97401
686-8453
Best for rides, housing board, work referral, of course complete listings of social service agencies, but less useful on individual people-to-people index.

West End General Store Co-op
1525 W. 6th
Eugene, OR 97402
485-0680
New co-op in town. Helped sponsor Community Food Conference (7/75).

Women's Press
Box 562
Eugene, OR 97401
344-4455
Now in fifth year, published every couple months.

Hoedads Treeplanters Co-op
454 Willamette
Eugene, OR 97401
344-1621
200 or so belong to Hoedads, contracting their own labor out to timber companies, Forest Service, fire-fighting, etc. Each crew elects a representative to central council; percentage of wages taken out of paychecks to support office, staff. Not looking for new members, but a good model for labor-intensive work co-ops.

Birth Control Handbook
P.O. Box 1000, Station G
Montreal 130, Quebec
(514) 844-5838
Published by Montreal Health Press, an excellent overall resource (48 pp.) on reproduction and non-reproduction. Free, send 25¢ for one copy, 10¢ each additional (up to 20) to cover postage.

American Youth Hostels
20 West 17th St.
New York, NY 10011
(212) 255-3310
Besides their well-known system of overnight lodgings, AYH will pay a small salary and expenses to anyone who organizes and leads a cycling tour for them. Special groups such as these may tour America, Europe or Asia. Guidebooks issued for hostel ing in 20 countries.

Poly Pak
Box 942
South Lynnfield, MA 01940
(617) 245-3828
Good source of inexpensive electronics and computer parts, including microprocessors and memory. Write for free catalog.

Planetary Calendar
P.O. Box 60
Alvadore, OR 97409
Nationally-popular astrological calendar, shows signs of sun, moon and planets, favorable and unfavorable signs, and some aspects. $2.50.

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H. H. Distributing Co.  
Box 212, University Station  
Seattle, WA 98105  
Handles the "D-cell," a small chunk of cement apparently impregnated with phytochrome (light-sensitive pigments similar to chlorophyll). Tests repute elimination of chlorine and other impurities from drinking water through breakdown of molecules. Hounded by FDA.

Tom Jett  
1178 Adams  
Eugene, OR 97402  
343-9132  
Solar designs for food drying.

Sam-Andy, Inc.  
P.O. Box 2125  
Beaumont, CA 92223  
(714) 845-1691  
Manufacturers of completely dehydrated food packages, for long-term reserve storage. Write for "The Family Food Reserve Story," containing nutrition analysis chart of various foods, bibliography.

Youth Rights Center  
1857 University  
Eugene, OR 97403  
342-5717  
Sponsoring programs for those under 18: Youth Awareness Workshops, perhaps leading to official city Youth Commission. Working with students planning own accredited alternative school.

Day Stream Video Communications  
645 Wilson  
Eugene, OR 97402  
687-2178  
New video production group in town.

Pacific Northwest Research Center  
c/o Sociology Dept.  
University of Oregon  
Eugene, OR 97403  
343-4022, Jerry Limpke  
Oft-published in Oregon Times, this group has documented such things as corporate involvement in the B-1 bomber, and currently examines the banking system in the Northwest, the role of Rockwell International, etc.

Growers' Market  
454 Willamette  
Eugene, OR 97401  
687-1145, W-F  
Largest food conspiracy in Eugene (Oregon? Northwest?) 500 orders each week. Complete order form includes all veggies, fruits, grains, cheese, fish, even granola (two kinds, no less!). One hour work asked for each order; 10-15% markup.

The Pyramid Guide  
P.O. Box 176  
Elsinoe, CA 92330  
Talk about alternative sources of energy! If pyramids do half the stuff claimed, it'd be worth investigation. Preserve foods, increase plant growth, improve sleep and meditation (clear difference in brain waves shown on EEG). Scads of books on pyramids, but this is the only good periodical I've seen—latest info and experiments. Published bi-monthly since 1972. Read about levitation effect, water dowsing, ray-gun shooter. And wait until you hear about cones.

The Living Wilderness  
729 15th St. N.W.  
Washington, DC 20005  
A membership in the Wilderness Society ($7.50 more or less) brings you this beautiful full-color magazine quarterly. Earthbeat section is bulletin-style tidbits; 4 pages of facts. Examples follow:

1) Environmental voting chart rates House of Representatives members. $1 to League of Conservation Voters, 324 C Street, S.E., Washington, DC 20003.

2) Young Indians wanting to learn craft work at Moon Mountain Indian Wildlife Preserve should contact Richard Thorpe, Mohawk, at 7073 Rogue River Hwy., Grants Pass, OR 97526.

3) Denali Citizens Council formed to protect Mount McKinley Nat'l Park and surroundings. P.O. Box 39, McKinley Park, AK 99755.

4) Index to Literature on the American Indian, $12/year from Indian Historian Press, 1451 Masonic Ave., San Francisco, CA 94117.

5) Five million off-road vehicles are zooming around the country. "ORV Monitor" pushes for regulation; $6/year from 2728 Durant Ave., Berkeley, CA 94704.

Gateway to Survival is Storage  
Walter D. Batchelor  
6120 E. Boston St.  
Mesa, AZ 85205  
75 cents each, 55 pp., 1973

Food Crisis Survival Manual  
Lee & Ellen Larsen  
Survival Arts  
P.O. Box 561  
Sales, OR 97308  
$3.95, 136 pp., 1974  
Both of the above were listed in A Bibliography of Survival Books, p. 57 of Organic Gardening and Farming, Feb. 1975. The complete list includes 16 titles; the real farmers know what's coming on.

How to Prepare for the Coming Crash  
Jefferson House  
P.O. Box 150  
Dept. 2  
Provo, Utah 84601  
$2.95.

Family Food Stockpile for Survival  
Office of Information  
U.S. Department of Agriculture  
Washington, DC 20250  
Free

Eugene Magazine  
1390 Mill, No. 203  
Eugene, OR 97401  
344-9540  
Media section wouldn't be complete without this quasi-slick stab at feature reporting.

Common Ground  
Box 4235  
Berkeley, CA 94704  
(415) 548-1233  

Continuum Limited  
P.O. Box 3218  
Eugene, OR 97403  
484-9158  
Larry Peterson, after a bout with the energetics of Oregon state politics, has settled in Eugene to chart a new course.

One in the Spirit  
P.O. Box 286  
Eugene, OR 97401  
345-9848, Daniel Jud  
New "Oregon spiritual community journal." Focussed on Eugene-Corvallis area. 25¢ per issue.
Summit International  
Box A  
Colorado Springs, CO 80901  
(303) 475-2133

There is a brotherhood of those who have mastered mind and body (see Synergy Access, Oct. 1974). They shun publicity, but now the essence of their teachings is coming out. One channel is Elizabeth Clare Prophet, head of Summit. They run a university in Santa Barbara, CA (first level enrollment limited to 70 students). They are into reversing destructive trends in the world through alchemy (the real thing), and invocation of a network of higher intelligence. A synthesis of many ancient techniques. Their material seems unusual at first, but truth is stranger than fiction.

Free University  
Box 2024  
Eugene, OR 97401  
344-5382, Bill & Cindy Wooten

Opens registration for new term periodically; $3.50 registration.

Media & Methods  
134 N. 13th St.  
Philadelphia, PA 19107  
(215) 564-5170

$9/year (Sept.-May)

Aimed at elementary and secondary educators, this magazine is a far cry from overhead projectors and flash cards. Enough new info on videotape, film, print catalogs, etc. to be useful to professionals.

Upcoast Trading  
General Delivery  
349 W. Georgia St.  
Vancouver, BC V6B-3P7

Preparing an illustrated catalog listing types of boats and waterborne services they offer. Interested in taking on passengers for trips away from the confusion and chaos of the city. Send $4 for catalog.

Northwest Alternative Ham Network  
c/o Randy Brink  
RFD 2 Box 301-B  
Port Orchard, WA 98366  
(206) 876-3460

Randy has slow-scan TV equipment, long-time correspondent on Cop McDonald’s New Directions Radio. Contact also me, OPEN, Bob Phillips.

Mitt Nodacker  
Box 8537  
Pocatello, ID 83209

Another ham, Mitt is into radio tele­type (RTTY), has a newsletter you can get a sample copy of with a stamped, self-addressed envelopes.

Theosophical Libraries  
The Theosophical Society, now 100 years old, was originally a group of adept clairvoyants banded together to disseminate the results of their work. The Theosophical Libraries have accumulated a vast stockpile of literature, much of it unconnected with the Society itself. Everything from auras to Zen; the Eugene library alone has more than 500 books, other branches many more. Northwest branches are:  
Theosophical Library  
1471 Patterson  
Eugene, OR 97401  
344-7772, 11-4 T, 5-9 Th, 11-4 Sat

Theosophical Library  
2377 N.W. Kearney  
Portland, OR 97210  
223-6861

Theosophical Library  
2050 Cypress St.  
Vancouver, BC  
(604) 738-2944

Open – Northwest Information Network  
I was hoping to send you something on this group, but I seem to have four different addresses for them. I'll keep working on it.

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Reality Library
1690 E. 26th Ave.
Eugene, OR 97403
345-5639, Paul Novitski
24-page catalog of magazine articles and books on every subject ($1). Strongest on sexism, mind/body, languages, poetry, fiction/set. Membership ($1/6 mo.) includes catalog, three bi-monthly magazines, and postage both ways for borrowing books (at library rate: 6¢ a pound!).

Hippocrates Health Institute
25 Exeter St.
Boston, MA 02116
(617) 266-1669, 267-9525
Excellent brochure on sprouting sunflower and other seeds, beans, grains. Nutrition food in a pinch for 15¢ a day.

New Age Mathematics Research Center
734 E. 14th
Eugene, OR 97401
686-0771
Interested in pyramids and other applications of esoteric math.

Well, that's about the end of my resources right now. Say, while we're at this networking biz, how about listing me?

Brian Livingston
1045 Monroe
Eugene, OR 97402
344-8249

An Inventory of Video Equipment and Materials in Oregon Education
Extension Communications
Oregon State University
Corvallis, OR 97331
or
CIRCT
Dekum Bldg.
519 S.W. 3rd
Portland, OR 97204
Useful guide to equipment in schools; for educators and others involved in local video work.

Northwest Media Project
P.O. Box 4093
Portland, OR 97208
(503) 223-0626
Are now working on an Oregon Film/Video directory; looking for information regarding individuals, equipment, films, tapes, etc.

Networks

Observations From the Treadmill
R.F.D. Number 1
Union, NE 04862
$2 per issue, $10/yr. (about 4 issues). We have a large collection of 1- and 2-person-run journals. This one is a personal journal of my as he journeys around looking at America. (Issue before last a long visit with Robert Reines—integrates Life Support Systems—fascinating!) This is a few remaining copies of Synergy Access and I.F. Stone Weekly I expect to keep.

Lee Novitski
454 Willamette
Eugene, OR 97401
687-2556
Not-for-profit typesetting service. 20% discount for private, non-profit organizations.

There are some resources I wish I had, primarily in the area of crisis survival. I'm not obsessed with it, but I think we're in the calm before the storm. I'd like to see a booklet on "what to put in your pack if you can't stay where you're at." Maybe I'll write such a thing... just how much food can be packed away (sproutable seeds ideal?) if need be. Anyhow, this has been great fun; why don't we send a packet to each other every month or so?

Yours indelibly,
Brian

(slightly edited version because we were running entries elsewhere in RAIN.)

World Soundscape Project
Sonic Research Studio
Communication Studios
Simon Fraser University
Burnaby 2, BC
I thought this group must exist somewhere: the John Cages of the environmental movement. Both The Book of Noise and Music of the Environment are refreshing looks at the world of noises. (Noise is disordered sound, without purpose.) You can always hear something: what's it doing to you now? They have other occasional publications (some focus on Canada), all unique and useful. Write for price list.

Ganglia
G.S.L.S.
189 College Ave.
Rutgers Univ.
New Brunswick, NJ 08903
Another among the growing number of small library journals. Jam packed, bibliographic style. Good introduction to community information centers in May issue. Free on request. (We're going to do a section on library journals in future issue. Any suggestions?)

Jaybird
P.O. Box 554
Republic, WA 99166
Just before someone pulled down our stage props at Portland State U. this package of ex-computer cards arrived, recycled by Joe Barreca and Bob Wallace as information trading cards. "In order to get it off the ground, Jaybird is sponsoring an information barter system. We will exchange 10 cards for 1 card worth of information for the common deck." Jaybird has, as far as we know, the most complete information on food cooperatives, distributors, truckers, mail order food (and related) businesses in the northwest.

Project Synergy
P.O. Box A-H
Stanford, CA 94305
Been around for several years. Their directory of individuals at the 1973 west coast conference is still one of the best indexed catalogues around. They were, awhile back, planning a mobile demonstration of low impact technology. Do workshops, etc. for reshaping professions, and other employment rethinking things. (Rumor is they may be moving to Aftand, Oregon.)
Excellent, Marxist judge in 

...write 

...avocados, adult learning exchanges, 
the Assassination Information Bureau 
(63 Inman St., Cambridge, MA 02139) 
...Resources also prepares mailing 
lists, like: People’s Booksellers Pro-
gressive Bookstore List ($7); The COS 
 MEP list of 350 libraries and bookstores 
that purchase alternative press publica-
tions ($5); Alternative America, 5000 
alternative lifestyle organizations ($50). 
Write for details on computer list vs. 
other methods, etc. (also the many 
special lists also available).

People’s Bicentennial Commission 
1346 Connecticut Ave. N.W. 
Washington, DC 20036 
A good alternative to some of the more 
commercialized (Freedom toothpaste) 
ways of celebrating the nation’s 200th 
birthday. They’re trying to encourage 
local celebrations relating to local prob-
lems and opportunities. Send for an 
excellent idea packet (which relates to 
a lot more than the Bicentennial), for 
$7. Includes subscription to newsletter, 
Common Sense.

Oregon Wilderness Coalition 
P.O. Box 3066 
Eugene, OR 97403 
They seem to keep on top of the many 
problems facing wild areas in Oregon. 
Their newsletter is the best way to find 
out about hearings and environmental 
impact statement submissions affecting 
Oregon wildernesses. $25 membership.

Center for Community Economic 
Development 
1878 Massachusetts Avenue 
Cambridge, MA 02140 
CCED is a research group which acts as 
an advocate, clearinghouse and informa-
tion source for social and economic 
problems (so says their brochure). They 
work primarily with Community De-
velopment Centers (CDC’s) and are 
funded by the Community Services 
Admin. The July-August issue of their 
newsletter was very informative about 
legislation and funding affecting com-
munities and the goings-on of various 
CDC’s all over the country. Excellent 
article on a conference on Alternative 
Public Policies where all the hip elected 
officials like Sam Brown (anti-war ac-
tivist elected treasurer of Colorado) and 
Justin Ravits (the Marxist judge in 
Detroit) shared ideas and experiences. 
Lots of ideas to be explored. Write for 
the CCED publications list.

Information Resources for Public 
Interest 
Public Interest Organizations 
1875 Connecticut Ave., N.W., 
Suite 1013 
Washington, DC 20009 
Enlarged new edition, with over 3,000 
groups; 3,000 individuals engaged in an 
credible variety of public interest 
action and research.

Environmental Information Center 
P.O. Box 12 
Helena, MT 59601 
Here is a good resource action group 
for contact in Montana area; envi-
ronmental legislation focus; along with 
Northern Resources Council, Hi 
Country News and AERO, creates 
a rounded base of information for 
Northern Plains & Rockies. (Have a 
nice newsletter)

American Revolution Bicentennial Co. 
of Oregon 
P.O. Box 1399 
Portland, OR 97207 
(503) 229-4805 
In Oregon is organized on the local 
level with a committee in each of the 
36 counties and two confederated 
Indian tribes. Each county and Indian 
reservation develops its own program 
of bicentennial activities and submits 
this program to us for approval and 
oficial recognition. One of the Mult-
nomah County activities is the develop-
ment and maintenance of the Oaks 
Bottom area into a wildlife sanctuary 
with work being done in conjunction 
with youth agencies and the Audubon 
Society. Also in the environmental 
areas: the Nature Conservancy Inven-
tory of Natural Areas has been en-
dorsed by the Bicentennial Commission 
as well as the Portland Zoo’s natural 
habitat/wildlife project. (Pam Kennedy, 
for the commission) 
For information regarding grants 
and projects funded, etc. contact the 
Portland office.

Eagle Kashaya 
American Ecology Fund 
Box 14 
Occidental, CA 95465 
A big jump in industrial waste recycling 
efforts is underway in the San Francisco 
Bay area, organized by Eagle Kashaya, 
a former market analyst from NYC who 
has dropped out/in to California, where 
he approaches industries with plans on 
how to recycle their wastes. He has been 
able to reduce several companies’ waste 
disposal costs by 25-50%, while making 
their by-products available to fill others’ 
needs. For example, 300 of the best 
mirrors you will ever see are thrown 
away every day by a firm that makes 
high quality mirrors for xerography 
because finding a market for their 
“rejects” would be too difficult for 
them, not knowing who might need 
the mirrors.

continued on page 26
Good

The Goodfellow Catalog of Wonderful Things and The Goodfellow Newsletter
P.O. Box 4520
Berkeley, CA 94704

The catalog is a lovely book; the crafts look loved and individual (though I've had no experience ordering). Prices surely comparable to other handcrafted items. The newsletter is designed to keep people up on other craft news around the country, fairs and shows, especially in California, but also national. Letters, book reviews, craft grants. $4.50 a year.

The Brain Revolution, by Marilyn Ferguson, Bantam Books, $2.25.
Two or three years ago, Psychic Discoveries Behind the Iron Curtain startled some and assured others that there was indeed a way to "prove" that there were entire lost or subjected provinces in the mind. The Brain Revolution picks up where that leaves off and takes us into the heartland of the American Academic world and reveals an astounding variety of psychic research being carried out.

"James Olds found that hungry rats were deterred from obtaining food if they had to cross a grid giving off 60 microamperes of electricity. To obtain brain stimulation, on the other hand, rats have crossed grids charged with 450 microamperes.

"Scientists can cancel the effects of earth's own field to create what they call a null field. Such an environment has strange effects on human beings. For example, ordinarily one sees moving pictures as separate—that is, flickering—until they reach the rate of twenty per second. The flicker fusion rate in a null magnetic field is ten per second. In other words, there is a loss of precision in our visual perception when we are denied earth's weak magnetic field. In mice, the null field causes premature deaths, aging, inactivity, cannibalism of the newborn.

"Déjà vu is the eerie, overpowering sensation that a current event has somehow happened before and in precisely the same way. . . . brain stimulation (can) achieve a similar effect. Only half a second's stimulation in the hippocampus and amygdala produces déjà vu. Jose Delgado of Yale noticed that patients stimulated in a certain region would listen to the subsequent exchange between themselves and the doctor with an air of amusement and bewilderment. 'But this has all happened before. I knew what you were going to say before you said it.'"

A very succinct, dense style with good bibliography.

Turtle Island, Gary Snyder, $1.95, New Directions, 1974.
If poetry usually feels like a Machine Design magazine to you, try picking up Turtle Island.
The rising hills, the slopes, of statistics
Lie before us, the steep climb of everything, going up, as we all go down.
In the next century or the one beyond that they say, are valleys, & pastures, we can meet there in peace if we make it.
To climb these coming creases one word to you, to you and your children: stay together learn the flowers go light
Almost artless. No fat or white wash. Careful and exact. Includes a revision of the Four Changes; commentary on "Energy is Eternal Delight;" even a page of facts: "A modern nation needs 13 basic industrial raw materials. By A.D. 2000 the U.S. will be import-dependent on all but phosphorous." North Pacific Rim (and/or Ecotopian) consciousness.

Mental Maps, Peter Gould, Rodney White, Pelican Books, $2.95.
I heard once about a woman who moved to Oregon based on a viewmaster slide of Crater Lake (which was recently polluted) when she was 8-10 years old. Try it sometime: ask people what areas they'd like to live in and why.

"When you were a child, perhaps you read Beatrix Potter's The Tale of Johnny Town Mouse, that delightful juxtaposition of the suave and knowledgeable city mouse and his simple country cousin, Willie. After an exchange of visits, both decide that their own landscape is infinitely preferable to the other's, and there are many people who feel exactly the same way."

I imagine that a lot of the 25% of the nation's energy consumption is from people wanting to be there rather than here, or here rather than there. "We are slowly realizing that people's perception of places is one of the things we must consider as we try to understand the pattern of man's work on the face of the earth."

Mental Maps is a report on studies done in England, the U.S. and elsewhere on how people perceive parts of the world, especially those they have only just heard about.
Things

An intense collection of poems, essays and letters by former inmates, doctors and others on the politics of being crazy. Excellent article by Dr. Caligari on drugs used in treatment. Highly political and full of righteous anger, yet warm with a healthy sense of humor.

Pilgrim at Tinker Creek, by Anne Dillard, $1.95, Bantam Books, Inc.
With both this and Lives of a Cell, by Lewis Thomas, I've heard about someone having bought 8 or 9 copies to give out to their closest friends. It is a kind of journal of days spent at Tinker Creek. A new and woman Thoreau? Kind of, but I think Thoreau comes out a slow second.

"I had read that spiders lay their major straight lines with fluid that isn't sticky, and then lay a non-sticky spiral. Then they walk along that safe road and lay a sticky spiral going the other way. It seems to be very much a matter of concentration. The spider I watched was a matter of mystery: she seemed to be scrambling up, down and across the air. There was a small white mass of silk visible at topmost speed. I understand that at our best—we are creatures who think, who play, who grieve, who create, and who care for our own kind and others.

So do the Cetaceans, the whales and porpoises whose world is so alien to ours that even attempting to conceive of their consciousness is to be thrown with wonder and awe up against our own ignorance.

It always comes as something of a shock to realize how little in fact we do know. We, who can seed the clouds and reach the moon, cannot fathom the sea's mysteries. Reading Mind in the Waters is a humbling experience.


There should be surprises for everyone, depending on where they're starting from. I found "The Dolphin Rider" by classicist Charles Doria perfectly astonishing in its blend of scholarship, humor, etymological insight and the breathtaking simplicity of his translations. (Catherine Johnson)
Continued


The first paper is a good overview of waste and recycling with local and national statistics. The second is a specific proposal for a collection and recycling system in the Mt. Pleasant-Adams-Morgan Area of D.C.—including cost estimates. No price given for either, but they are 12 and 9 pages, respectively, so Xerox costs and large SASE would probably help them out.

_The Wastebin_
P.O. Box 14012
Portland, OR 97214

A new "interactive newsletter about practical recycling"—the first issue includes details on the Ore Plan, including drawings of the hand-pushed cart with bins for different kinds of materials. At least 2 more issues are planned. Send a self-addressed, stamped (26¢) envelope for each issue.

_Oregon's Bottle Bill_
Oregon Environmental Council
2637 S.W. Water
Portland, OR 97201

$2.50/copy (bulk rates available). There've been countless articles and contradictory reports. This booklet is compiled by one of the persons most responsible for the bill; though rather oddly designed, looks like the last word, and as the Plaid Pantry (a minute market chain) billboards announce, "it does work."

_Solid Waste Management (available information materials)_
U.S. EPA
Ntl. Environ. Research Center
Cincinnati, OH 45268

An extensive list of publications available on solid waste management. Papers produced by EPA as well as other agencies.

Hello,

I'm sorry it has taken me so long to return these. I had a few problems to work out first.

The reason these were taken to begin with is because they're beautiful in themselves. The house was such a mess I honestly didn't think anyone would move in and try to repair anything. But you have and are working hard and it looks wonderful.

So here we have your long lost and loved doorknobs.

(found at our front door in sack of doorknobs)
September east winds bring some of the clearest skies to Portland, though sometimes slash burning east of here brings an odd haze which abounds things. The wind comes in and parts the hair of the city the wrong way; most of the year the winds come from the southeast. It feels very dry; the dust jacket of the Oregon desert looking in on the usually cool evergreen forests. Firelike and kid-like exuberance in the wind; kites and newspapers go nuts.

BILL GABRIEL runs the cosmic auto repair in Sweet Home, Oregon; he also operates a kind of "switchboard," according to Bill Thomas in a Capital Journal article. He operates out of his garage his own social agency: "taking calls for the people in the area without phones, running a casual sort of employment agency, finding places for people to live." Bill Thomas goes on to describe others in the area, like Bill and Cindy Wooten in Eugene and Jack Eyerly in Portland, who run their own information and referral operations.

Thomas concludes: "by using our skills and talents to help our neighbors, we will not only be reducing the dependency upon governmental programs, we will be fostering the positive aspects of inter-dependency among people, more community and national self-awareness and our own personal growth." . . . TALL GRACEFUL MEN who are seen only for seconds. Ringing bells in the middle of the forest. Seasoned climbers who were foolishly turned back from their climb by impassable energy barriers. The city of Mt. Shasta, California, where there are more religions per capita and per square mile than any other piece of real estate on earth. . . . THIS WAS YOUR LIFE was sent to us from Chick Publications. How did that happen? . . . "I HAVE FOUND HENNY PENNY, Cocky Locky, Goosy Poosy, Ducky Daddies and Turkey Turkey, but not a sign of Chicken Little, except for one obscure reference under Henny Penny's name. It appears Henny Penny was d.n.a. (doing business as) Chicken Little at one time."-Joseph Alioto, San Francisco mayor. . . . THE SOUNDSCAPE people (see elsewhere in this issue) have suggested an FM radio service that would listen in rather than broadcast from a remote area so we could listen to the sounds of wilderness without having to go there. . . . SUGAR BEETS in Oregon showed the largest single crop acreage increase in 1975. Five times or more than others. . . . GLEN T. SEABORG, former chairperson of the U.S. Atomic Energy Commission, has predicted that by the 1990s America will be a recycle society. . . . AVERAGE U.S. HOUSEHOLD SIZE dropped below 3 persons in 1974 for the first time in history. . . . CAPTAIN COMPOST and the Eco Freaks recently climbed the "Before Handel" sculpture on the Huxley College campus. . . . AUG. 15: East West Journal interview with Sheila Ostrander and Lynn Schroeder, authors of Psychic Discoveries Behind the Iron Curtain. . . . "THE GREATEST THREAT to the environmental movement is the environmental movement itself. Over the past several years, it has fallen into the hands of a small, arrogant faction which is dedicated to bringing our society to a halt. I call this faction the Prophets of Shortage. They are the anti-producers, the anti-achievers. The doctrine they preach is that of scarcity and self-denial.-Don Hodel, Bonneville Power Administration, quoted in Western Aluminum News. . . . HARPER'S WEEKLY did some experiments with pyramids, having some success growing bean sprouts, which grew better in the pyramid than in the "control" box. They are looking to publish results of any other research done by folks. 2 Park Avenue, New York, NY 10016.

. . . TASHIRE HARDWARE CO. (109 Prefontaine Place, Seattle, WA 98104) sells Japanese tools. Send for catalog. There is a real zen and the art of tool loving salesman there, who more or less told us how to sharpen a plane by clearing our heads. . . . MISSING is a nationwide magazine about missing persons, like teenagers and D.B. Cooper. . . . CAPTAIN JACK is building a spacecraft in the hills southwest of Portland and calling it his home. "I was born on Saturn, but our family got kicked off the planet because my dad was fired from his job. We went off to Mars, but it was horrible there, so bushy and no social life. One night I was out with my chick and we ran out of gas. The gravitational pull brought me down to earth and every since I've been trying to figure out how to get back. "Instead of food, Captain Jack said, he drinks what he calls "motor cola," and needs only one bottle of this a day to sustain himself. . . . IN SWEDEN a plant is being built to process 8,060 tons of chicken feathers into 3,000 tons of protein. . . . POST ALASKA PIPELINE rents in Fairbanks: cabin, no running water, $300/month; 3 bedroom apartment, $600/month plus electricity; 1 bedroom apartment, $400 including utilities. . . . RODALE PRESS conducted a modest experiment. For one month, toilet paper rolls used in the main building of Rodale Press were trimmed by 1/2 inch in the print shop. Unsuspecting employees went through just about the same number of rolls as before, using 11% less paper without even knowing it. Trivial? The savings translates into over 2-1/2 million trees.
TERRA ONE is an experimental home being built at the Oregon Museum of Science & Industry, utilizing various energy conserving techniques (solar heated, etc.). Major participants are OMSI, Pacific Power & Light, Skidmore, Owings & Merrill. ... DENNIS Livingstone sent us a good bibliography on "positive alternative futures," having all the touchstones I'm familiar with and then some. Good listing for environmental teachers and others. Send $1 to him at Department of History, Rensselaer Polytechnic Institute, Troy, NY 12181. ... CLIFF Cox, one of the founding members of Nomadic Tipi Makers, now makes sails in Olympia; also still makes Sioux tipis, Deschutes tipis for stoves. Cliff Cox, Sailmaker, Rt. 14, Box 510, Oyster Bay Rd., Olympia, WA 98502. ... THE Women's Art Center (2700 19th at York, San Francisco, CA 94110) is putting together an environmental piece and is looking for works from women around the country. ...THE Idaho Study Group (P.O. Box 8482, Moscow, ID 83843) has been formed to do research into the power structure of Idaho. ... THE United Nations' new center in Nairobi, Kenya, may provide on-site tests of "now exotic" technologies—methane generation, discouraging private auto, wind-generated power, etc. ... THE International Association for Education, Development and Distribution of Lesser Known Food Plants and Trees is working toward the public understanding and utilization of now little used plants. Which sounds interesting, but they left off their address? ...GUIDE for Prospective Water Well Owners, Dept. of Ecology, St. Martins College, Olympia, WA 98504. ...THE Sacramento County office of education produces a jam-packed newsletter, lots of environmental news and resources, some northern California focus. J. Martin Webber, editor, Science Activities Newsletter, 6011 Folsom Blvd., Sacramento, CA 95819. ... FUTURES Lab (Box 120, Annex Station, Providence, R.I. 02901) has announced it is working on "World Models," an introduction to the state of the art. ... TROJAN (the condom makers) are advertising their products on KNTV in San Jose. One ad shows a young couple running on the beach with the quotation, "To everything there is a season, and a time to every purpose under heaven." ... THE Environmental Education Association of Oregon (P.O. Box 5484, Eugene, OR 97405) sponsored a statewide in-service program on Oct. 10-11, the first major activity of this newly-formed coalition. ... A REPORT by the census bureau made public last December said that from March 1970 to March 1974 an estimated 5.9 million persons moved out of metropolitan areas, while 4.1 million moved in, a net loss of 1.8 million; although some of the rural growth is just the outer extremes of metropolitan growth, some is growth of small towns far away from large cities. ... CO-OP Contacts is still plugging along now, about 10 pages, 50 people per issue making contact, 9305 S.W. 12th Drive, Portland, OR 97219. ... THE Compendium of Current Environmental Studies in Puget Sound and North West Estuarine Waters and a bathymetric map of the continental shelf and slope off the Washington coast are both available from: Oceanographic Institute of Washington, 312 1st Ave., N. Seattle, WA 98109. $16 for the compendium and $4.95 for the map. ... THE City of Portland decided that the office of information coordination was dispensable, so left Molly Weinstein who had helped people weave their way through names, offices, files, figures, and produced that fine guide we reprinted in Nov. 1974 RAIN. ... THE Upland Hills Farm (481 Lake George Rd., Oxford, MI 48051, 30 mi. north of Detroit, offered workshops this summer in solar, wind, methane. ... THE Washington State Energy Office has opened another office at the Institute for Environmental Studies, 112 Sieg Hall, U. of Washington, Ed Sheets, staff person, 543-7749. ...KARL Hess has left Community Technology to live on a farm in West Virginia. ... WASHINGTON University is studying the relationship of the quality of city air and soil and the quality of city grown food. Environmental Re-
The volatile chloroform thus produced enters the atmosphere and reaches the ozone layer where it could react in the following manner:

\[ \text{HCCl}_3 + \text{uv} \rightarrow \text{HCCl}_2 \cdot \]

\[ \text{Cl}_2 + \text{O}_3 \rightarrow \text{Cl}_2 \cdot \text{Cl}_2 \cdot \]

When one realizes the amount of chlorine used for water treatment, the amount of freon-type aerosol propellants used to date becomes almost insignificant by comparison.

Chlorination of municipal drinking water was also the primary cause of the crippling epidemics of polio in the '40s and '50s. The vast sums spent on the development of polio vaccines were spent purely because chlorination of drinking water prevented people from contracting a very mild form of polio previously universal in early childhood, which provided their bodies with antibodies that prevented their being stricken later by the dangerous form of polio.

Chlorination of water—like all our violent, and in the long run ineffective and dangerous means of dealing with other endemic life forms—also has proven to be merely a means of speeding the evolution of more resistant and dangerous varieties of the disease vectors they attempt to control. To a point you can play ping-pong with larger and larger doses of drugs and chemicals against more and more resistant bugs, but such games forget that our bodies are innocent bystanders that don't evolve that fast and are the recipients of ever more violent and dangerous diseases and drugs. In the not-too-long run the odds are also that the winner of the ping-pong game will be the bugs, as the resources we can devote to such games—like all our games—are becoming more and more limited, and we are reaching the levels of toxicity that our bodies can stand.

There's really no lazy-man's shortcut to doing things properly. All we really have to do is keep our water sources clean and stop dumping our sewage into them (which we ought not do anyhow)!

(T.B.)

**Small leaks**

As figures here show, the cumulative effect of even small leaks can add up to large volumes.

- **one drop per second**
  - per hour = 6 ounces
  - per day = 1 gallon
  - per week = 8 gallons
  - per month = 24 gallons

- **drip breaking to a stream**
  - per hour = 1 gallon
  - per day = 24 gallons
  - per week = 147 gallons
  - per month = 588 gallons

- **1/8" stream**
  - per hour = 11 gallons
  - per day = 260 gallons
  - per week = 1,512 gallons
  - per month = 6,208 gallons

I think this would be good to put in RAIN. (Ken Smith)

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**Chlorination and Ozone Depletion**

*Not Man Apart Letter*, Sept. 1975
Herbert Schwartz, Ph.D.

Blackbird
2648 Stuart Street
Berkeley, CA 94705

Dear Rainpeople: Some of us here are working on creating a bio-centennial road show, a combination of news and music from the standpoint of natural rather than national history. We expect to be working on bookings for the show in a couple of months. P.S. Enclosing a poster ("Living Creatures," spontaneous ceremonials, music from the rapture circuit, 6:09 p.m., Malvina Coffee House, Union St. near Grant in North Beach). We did an all-night solstice ceremony recently and now are doing an earth environmental news and music show at United State Cafe in S.F.

Arakir Propane Conversions
Rt. 2, Box 96C
Leslie, AK 72645

We're the only outfit I know devoted to making it possible for earth-minded folk to convert their own vehicles to propane at the least possible cost, saving money on fuel and maintenance costs, while reducing pollution 70%. We're homesteaders, and so far as I know, the only place in the country where people can get any conversion equipment at discount, together with do-it-yourself instructions. Formally: Point Arena Volkswagen or Arakirks Volkswagen. (Jerry Friedberg)

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**Learning About the Built Environment**

National Association of Elementary School Principals
1801 N. Moore St.
Arlington, VA 22209

$3.00

The educational facilities laboratory has put together this source book in environmental education for elementary and secondary levels. It's hard to imagine anyone active in the field not being aware of most of these resources (books, organizations, films & games), but if you're new to the subject you'll probably find it helpful.

**Andy Uchera**
Heliotrope Natural Foods
2060 Market N.E.
Salem, OR 97301

I'd like to participate in a conference/dialogue with other people involved in small business alternatives/cooperatives. Also we're interested in setting up an alternative power demonstration involving the store, i.e., running one of the store's lighting or refrigeration systems via solar power, etc. We need info or a resource person who can tell us what's feasible, what technology is available, cost estimates, etc.

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**Will King**
NW Regional Foundation
Have you seen John Brainerd's *Working With Nature: A Practical Guide?* One of the most delightful books I've seen in years. For the steward/user of the earth and its bounties, on macro and micro scale. Ecologically maximizing ways to do cross-fauna, build homemade mul-verks for home and trail, and much more. Praise be to Brainerd. Excellent 589 item bibliography and beautiful index.

continued on page 30
I want to let you know about a new central Oregon journal called White Mountain Mirror. I am literary editor and have high hopes for it. A kind of general audience thing, with an environmental, whole systems approach. Plan is for tri-weekly schedule.

Jon Schwartz
1030 N.W. Roanoke, Apt. 2-6
Bend, OR 97701

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Slim (Tharman) L. Reynolds
Sumerian (World Improvement Assoc.)

I am sending a rough drawing of tunnel-type tachai homes for the future. Do you know of an architect or group of young architects that would work at developing new communities and variations of apartments and homes based on the simple tunnel. I would like to supervise a chain of health ranches to get people into the physical improvement of their health and their environment. If you know someone or some group that would finance one or would wish to turn their ranch into a do-it-yourself health ranch based on Dr. Bernard Jensen’s Hidden Valley Ranch at Escondido, CA, please let me know.

Wilbur Hot Springs
Via Williams, CA 95987

Wilbur is an old curing spa which I began restoring 3-1/2 years ago—we are on the path towards being a holistic eco-community, a therapeutic milieu which in and of itself is nourishing enough for people to “cure” themselves without the great expense of professional intervention. For those who want or need such professional consultation for training/treatment, we also offer residential programs (gestalt, yoga, love and humor, country living). We hope and work towards using the hot waters for heating, refrigeration and someday air conditioning. Areas we need technical info on are: toilets w/o plumbing, low cost housing, real scoop on methane bio-digesting.

Richard Miller, PhD, caretaker
Wilbur Hot Springs
Via Williams, CA 95987

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J.R. DeWeese
Lake Cowichan Information Service
General Delivery
Youbou, BC VOR 3EO

Dear RAIN: Thanks for the piles of eco-engineering newsletters and related documents, which I have sent along to various rural outposts via the regional library bookmobile and by mailing selected bits to various friends. . . . All of the original Vancouver Free University “People’s Engineering Group” now live at some distance from each other and are involved in distinctly separate trips . . . such as house and boat building with alternative energy, playing a very quaternary role; we all still keep files on the current state of the art, but no one is building anything (though one of the boat builders sharpens his chisel and plane blades on a functioning pelton no 1 motor/grinder). I see that credit union banking and co-op food stores are surfacing in your area, and,

around the sun: March 21, 1976 to March 22, 1977. We need any information you have that would make this trip easier, more enlightening, or more fun.

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as these are well-established organizations with the trade union movement in western Canada, I may be able to provide you with some useful material from these areas or from the new consumer protection act or farm supports and the land lease program . . . . I will be happy to supply more details if any of this looks to be of any use to you and your readers . . . . I have an unopened publication from the People’s Republic of China which I think shows their Pearl River Tide generator complex, which irrigates fields by day and makes electricity for the town lights by night . . . . Government-run car insurance; $100 a year malpractice policies of doctors from the fed. gov. or whatever. Keep in touch.

Steve Mitchell
513 Longfellow Ave.
Hermosa Beach, CA 90254

Dear RAIN: A while back I wrote someone who had constructed a bicycle-gear-driven blender that could do 10,000 rpm’s. Well, we were thinking of possibly putting this together with a pump to help aerate a fish pond. Alas, the info never arrived, and I can’t find the source. So, have you heard of this and know where the people can be contacted? Thank you.

Alan Garten
c/o Food Action Council
P.O. Box 1255
Eugene, OR 97401

We’re focusing our attention now on the harvest faire, scheduled for Sept. 27. We’ll have a free harvest feast and a natural foods bake-off, plus demonstrations on herbal healing, methane energy, heating with wood, bee-keeping, wild foods, food preservation, a bicycle-powered blender, cider press, square dancing, and who knows what else.

Hog Farm, Pacific High School
12100 Skyline Blvd.
Los Gatos, CA 95030

Hi. We’re hoping you folks might have some useful information for us. We would like not just technical data and filter, but literary material relating to an enlightened relationship between man and environment. The Daily Planet is a guide providing information about this journey, the next revolution as these are well-established organizations with the trade union movement in western Canada, I may be able to provide you with some useful material from these areas or from the new consumer protection act or farm supports and the land lease program . . . . I will be happy to supply more details if any of this looks to be of any use to you and your readers . . . . I have an unopened publication from the People’s Republic of China which I think shows their Pearl River Tide generator complex, which irrigates fields by day and makes electricity for the town lights by night . . . . Government-run car insurance; $100 a year malpractice policies of doctors from the fed. gov. or whatever. Keep in touch.

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12100 Skyline Blvd.
Los Gatos, CA 95030

Hi. We’re hoping you folks might have some useful information for us. We would like not just technical data and filter, but literary material relating to an enlightened relationship between man and environment. The Daily Planet is a guide providing information about this journey, the next revolution
Binda Colebrook  
141 Euclid  
Seattle, WA 98122  
I am organizer for PCC's winter gardening project. We are trying to build a body of information to ascertain the production possibilities of winter crops in the Puget Sound area. The project will run through the spring of '77, hopefully culminating in the publicity of our findings.

Ken Bossong, co-editor  
People & Energy  
1779 Church St. N.W.  
Washington, DC 20036  
The Center for Science in the Public Interest is presently trying to compile a listing of citizen groups that have undertaken energy conservation programs—i.e., programs in which the group itself is directly coordinating an energy conservation campaign or else programs in which the groups directly influenced actions by state or local governments to institute energy conservation efforts. If you know of any groups that are so involved in energy conservation programs, I would appreciate hearing about them.

Tom Bender, E.E.L.  
Systems Communicator and  
Synapse Snapper  
Mr. Steve Johnson: R.M. (Rainmaker):  
A synapse lapse was noticed in the latest RAIN piece on place: Wendell Berry, The Long Legged House, is basic and inexcusably absent. His The Memory of Old Jack is also good, but only J.B. Jackson's Landscapes is a collection of his writings from Landscape magazine—no longer printed but a goldmine of Place. Also: Van Eyck's writings in Team 10 Primer are cosmic perceptively. Dorothy Lee's Freedom & Culture also has some rather good things. And, of course, The Environmental Design Primer. If you can stand more, overturn. And lastly, a note on the future of humanity: When you are finally Independent Rain Makers, you can handle your own financial affairs and have printed your own, personalized, Rainchecks. Mildewy yours, Tom Bender, E.E.L. Systems Communicator and Synapse Snapper.

Bill Logan  
Energy Education Directory  
c/o Energy Information Center  
Grant Rd.  
Newmarket, NH 03857  
The Energy Information Center is working with N.H. state education dept. and the Governor's Council on Energy to encourage the development of energy-related curricula in school systems. We are presently compiling a directory of programs and energy-related courses. If you have knowledge of an energy education program, games, films, etc. please let us know about it. Information regarding intended age group, cost of program, funding sources would be particularly helpful. All contributors will receive a free copy of the completed directory.

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**CALENDAR**

Oct. 16-18  Montana Alternative Agricultural Conference, Billings, Montana. Workshops on alternative energy, organic farming methods, cooperative farming and marketing. Contact T.J. Gilles, Rt. 1, Box 300, Laurel, MT 59044.


Oct. 31-Nov. 2  Natural Living and Agriculture Conference, Blue Mt. Com. College, Pendleton, Oregon. Keynote speaker: Don Newey, fish culture, organic gardening, food crops, bee keeping and much more. Contact: Relta Tucker, Rt. 3, Box 62, Milton-Freewater, OR 97862. ($5 registration fee)


Fall '75  Red Barn Program, Eastern Washington State College, Cheney, WA. 99004. This fall is offering courses in: primitive and folk medicines; mycology and plant pathology; ecological building practices; sewing fur-like and leather-like fabrics, windpower.

Sept. 29-Dec. 7  Living Systems Institute. Marylhurst Education Center, Marylhurst, OR 97036, is offering a course in Homesteading as an Alternative, taught by Glen Simmons, and The Art of the Estate Garden, instructor, Mr. MacCartney. Both $20 for 10 sessions.


Oregon Museum of Science & Industry Workshops:

Oct. 16  Basic Electricity. Generators, alternators, heat pumps and batteries will be examined and wired or torn apart. The Hall of Electricity will furnish additional illustrations of the uses and properties of electrical energy. This class is basic background whether you're building wind generators or doing home wiring. 7:30 to 9:30 p.m. Fee. Contact OMSI Ed. Office, 248-5907.

Oct. 20  Home Insulation – Jack Warren, PGE. Workshop will cover Oregon insulation codes, basic fundamentals of insulation materials, and the relationship of insulation to dollars saved in heating and cooling. Participants will learn which home insulation procedures they may do themselves and which should be done professionally. Fee $1.00. OMSI members free. 7:30 to 9:30 p.m.

Oct. 23 & Oct. 30  Buying or Building a Wind Generator – Ric Siewert. This two-session class will introduce wind generator designs that may be purchased or built. The class will also cover economics of wind energy and planning electrical storage of the generated electricity. (If you need background information, we urge you to sign up for Basic Electricity.) Two sessions: 7:30 to 9:30 p.m. Fee. Contact OMSI Ed. Office 248-5907.

Oct. 22  Weather Varieties & Grain Production will be the subject of the second lecture in a series on the subject of our changing climate and the effects on food production. Sponsored by the Oregon Graduate Center. 7:30 p.m. Free.