Dear Rain,
After reading Jim Springer's article about the Trident resistance I feel compelled to respond to what seems to be a fairly common attitude within the movement against nuclear arms. I refer to the attitude that "the cause of arms creation and war is rooted inside each of us," and that in working for arms reduction it is important to first overcome the "tridents within ourselves." This view is expressed by many leaders of the movement who are Christians and/or pacifists and who see the arms race as primarily a moral issue rather than an economic and political one. I believe the notion that we should focus on our "inner work" is a wonderful sentiment but a lousy strategy.

At the risk of oversimplifying a complex situation, I would like to suggest three factors which I believe greatly contribute to "the cause of arms creation and war" and which are rooted not in individual psyches but in our socioeconomic and political institutions.

The first factor is the boost that military spending gives to the domestic economy. Weapons production is extremely lucrative, and it just so happens that the top military contractors are among the largest and most influential corporations in the country.

Secondly, a strong military force is necessary to maintain the imperialistic policies of U.S. multinational corporations. These corporations depend on foreign countries for their natural resources, their additional markets, and their cheap labor, a point brought out in Tom Bender's fine article, True Security.

A third factor contributing to military escalation is the vehement anticommunist ideology which is so important for sup-
pressing fundamental criticism of the social order in a country founded on the right of free speech. This same ideology which works to silence domestic dissent also serves to engender a public hysteria which automatically legitimizes any kind of extreme measure taken to "protect us from the communists."

As long as these conditions exist, any positive step toward arms control and reduction will be temporary at best. This involves going beyond "looking inwards" to the cultivation of a sophisticated social awareness. For the nuclear arms race is not primarily a matter of love and hate. But ending it is certainly a matter of life and death.

Sincerely,
Lance Regan
Bellingham, WA.

Dear Gentlemen:

I am currently enrolled in a sociology class at El Camino College. Our current assignment in the class is to write about simple and economical ways to build a house. I am interested in homes that are being built underground and inside mountains, etc. Could you please send all information on this type of housing and other unique, inexpensive, and economical ways to build a house?

Cindy Guyton
Torrance, CA

(Boy, do we know about that sociology class at El Camino! We've gotten a dozen letters from that class. We cannot easily supply ALL the information on underground housing. It would probably take several days to pull that together (at least!). Also, by the way, most of the time there are as many, or more, gentlemens as there are gentlemen working at RAIN.)

Dear Rain,

When writing your Bioregion Report, "County Zaps Radio Waves," you should have verified your information. While Multnomah County is indeed the first to place all aspects of broadcast tower siting into one ordinance, they do not possess the first comprehensive set of regulations regarding major sources of radiofrequency pollution.

Portland's radiofrequency emissions standard is not advisory only; it has a dual nature. An advisory standard of 100 microwatts per square centimeter (one-half the county standard) was instituted to express the standard that the Portland City Planning Commission felt the industry "should" apply to. Without conclusive evidence that this standard was necessary, the mandatory standard was set at 1000 microwatts per square centimeter.

The City of Portland does have a more intense electro-magnetic environment than some other cities. However, in all fairness it must be pointed out that recent studies have shown Portland to not be an extreme example in any sense.

Last, but certainly not least, is the years-old song of the EPA's impending release of a national radiofrequency standard, or even the release of the oft-promised documentation of pertinent studies. The effort you refer to began sincerely enough, but the research summary has since been withheld and the broadcast industry has been promised no more than the publication of a federal guideline. A federal guideline is a device that would apply only an advisory standard to federal agencies.

Sincerely,
Steven W. Gerber
Portland, Oregon

(Thank you for pointing out our error.)

Dear RAIN,

"Beyond the State" is a very good article — congratulations for the fine piece of writing. I was wondering if I could have permission to reprint it for friends? I would also include publicity for RAIN magazine on the last page of reprint? I'd really appreciate it.

Also the whole issue was fantastic. Please pass the word on to the rest of staff. Great work.

Best,
Larry Sheehy
Fresno, CA
RAINDROPS

At his first staff meeting, our newest intern Kris Nelson told us that he was waiting for the (proverbial) dust to settle in order to see how things "really" fit together at RAIN. His remark was met with polite guffaws; Kris was the third intern in a row to make that remark.

Changes keep happening so fast around here that dust does seem to be raised. John Ferrell, a mainstay at RAIN for over two years has left to join the staff of the California Office of Appropriate Technology. Laura Stuchinsky, another old time Rainiac is no longer a RAIN staff member but is working through RAIN in organizing a Northwest regional agriculture conference (see Northwest News Section). Bruce Borquist, too, has moved on, taking a job as a community developer in a small town just south of Portland.

Meanwhile two new interns have joined the staff, Kris Nelson, who helped organize the Options Northwest Conference, and Penny Fearon, who originally came to RAIN as a staff aide to the Solar Nelson, who helped organize the Options Northwest Conference, and Penny Fearon, who originally came to RAIN as a staff aide to the Solar 82 conference.

This RAIN Magazine was produced by a new staff team, with some old timers contributing. We were fortunate to have had John Ferrell leave behind probably one of the most well-documented transitions in the annals of nonprofit organizations. From the how-to manual he produced and memos left around like easter eggs, we were able to pull together a facsimile of the RAIN you all know.

We did make some changes in RAIN, several of which have been in the making for months.

The ORGANIZATION REVIEW is a place where we can focus attention on people working together: shining examples, unique perspectives on community and global problems, and groups offering information and assist-

AMAZING TECHNOLOGY

The microcomputer market is likely to be dominated for some time to come by IBM's entry into the field. It has been projected that there may be a million IBM microcomputers on the market within a year. The crop of microcomputers starting to come out this fall are faster, more intelligent, and roomier than the last generation of microcomputers. The new machines are commonly referred to as the 16 (and sometimes 32) bit machines. The tiny chip which dictates the number of electronic moves that can be made at any one time is called the Central Processing Unit (CPU). Suddenly in the new machines there is more space to write more complex software programs. The new microcomputers also make use of hard disk technology, a low-cost magnetic storage medium that allows ten to fifteen times the storage area of typical floppy diskette models. We are in a kind of "meanwhile" stage. The software market is aimed at 8-bit microcomputers and it will take time for software to catch up with the increased capacity of 16-bit machines. So in the meanwhile some manufacturers are offering machines that can run both 8-bit and 16-bit CPUs.

There is a good overview on the current generation of microcomputers in the September issue of High Technology ($2.00/issue, 38 Commercial Wharf, Boston, MA 02110)

ORGANIZATIONS

Knowledge Index
Dialog Information Services, Inc.
3460 Hillview Ave.
Palo Alto, CA 94304
415/858-3785

Knowledge Index is Dialog's entry into the personal computer information utility market, competing with others such as The Source and Compuserve. Knowledge Index is an abridged collection of the databases that Dialog offers its regular customers with some new tricks to satisfy personal computer operators including a means to print out entries found in the Dialog databases — providing your computer is equipped with telecommunications software and a device for translating from analog to digital communication (a phone modem). The basic fees are time online, $24/hour, which includes long distance telephone line charges, and a $35 one time fee for a manual. Articles, reports, etc. which are located by users on a database can also be photocopied and sent to the user ($4.50 plus $.20 per page). Contents include computers, engineering, agriculture, medicine, daily news, education and psychology.
The 1983 annual conference of AHP is being planned around a networking theme conceived by Jessica Lipnack, Jeffrey Stamps (authors of Networking: A First Report and Directory), and others, to be held in Toronto in June 23-27, 1983. The title of the conference is Conscious Networking for Individual and Social Change.

Other changes at AHP have brought to the organization new co-presidents-elect, Rick Ingrasi and Peggy Taylor, who also write for and publish New Age Magazine.

Citizens for Video Democracy
PO Box 820
Menlo Park, CA 94025
Citizens for Video Democracy, headed by Duane Elgin, author of Voluntary Simplicity, is addressing the need to increase the knowledge content of mass media. They are presently distributing a petition to call upon national television networks and local stations to allocate one-third of prime-time hours to informational or socially relevant programming.

Communitree Group
470 Castro Street, Suite 207-3002
San Francisco, CA 94114
415/861-TREE (voice communication)
415/861-6489 (computer communication)
Dean Gengle, with Communitree recently wrote to update us on Communitree’s activities. Communitree offers telecommunications software that allows one to use a microcomputer to form computer mediated communication networks. Several networks have been formed using Communitree, including one in Berkeley which is of general interest (415/548-4683) and one with health information for the disabled (415/325-7066). Gengle also says that Communitree has been used by an Alaskan political candidate to set up a network among his supporters.

Community Memory Project
916 Parker Street
Berkeley, CA 94710
415/841-1114
Community Memory has released information about a new relational database system with word-processing facilities, which is being offered by Pacific Software Manufacturing Company, 2608 Eighth Street, Berkeley, CA 94710 (415/540-0616).

From royalties for licenses to use the software, Community Memory expects to develop a community pilot project where people would be provided with access to a computer which used Sequiter to facilitate communication networks and information sharing.

Peacenet
Disarmament Resource Center
942 Market St., Rm. 708
San Francisco, CA 94102
415/495-0526
Peacenet is a group of people involved in using computers and telecommunication in the cause of peace. Program goals include developing computer-mediated communication networks and a database on peace and disarmament issues.

Telecommunication Project
Gay Press Association
PO Box A, Old Chelsea Station
New York, NY 10011
212/242-6863
The Gay Press Association has launched a research project to determine the use and interest in computers and telecommunications among the Gay and Lesbian communities. The project will study such things as computerized conferencing, Gay information banks, public access to technology and information.

Union for Democratic Communications
Dept. of Radio-TV-Film
Temple University
Philadelphia, PA 19122
A national organization of communication researchers, media producers and activists. The group recently sponsored a conference with workshops on such topics as Political Economy of Telematics, Building Democratic Communication Theory, and Media Use in the Third World.

PUBLICATIONS
Delicate Bonds: The Global Semiconductor Industry
Lenny Siegel
Pacific Studies Center
867 W. Dana Street, #204
Mountain View, CA 94041
$2.00, 1981
An important perspective on the growing electronic industry through examination of the nature of the worldwide semiconductor industry which includes use of cheap labor in many Third World countries for production of chips and other computer parts.

Information Industry Market Place 1982
R.R. Bowker
Box 1807
Ann Arbor, MI 48106
A comprehensive directory to the information industry, including lists of information brokers, database publishers, machine readable databases, telecommunication networks, library networks and consortia, online vendors, online user groups, reference books and periodicals.

Microcomputer Buyer’s Guide
Tony Webster
Computer Reference Guide
$27.00, 1981, 326 pp.
We get a lot of requests at RAIN about how to research the buying of a microcomputer. Mostly the field changes so rapidly that the best guides are people who keep up on the technology. No buyer’s guide is going to be complete or up-to-date but this one gives it a good try. The first chapters provide basic descriptions about computers including discussions about hardware, software, peripheral devices, etc. The rest of the guide is a brand-by-brand discussion of different microcomputers on the market.

Other Networks
PO Box 14066
Philadelphia, PA, 19123
$15/year, quarterly. This is a good quality, low cost production. The editors know how to put together an interesting, well-rounded sampling of innovative communication networks. From the Alliance of Home Business Women to fanzine types (underground comix and fantasy magazine networks), Other Networks describes them all. There isn’t any of the I-am-the-best-Networker-around-stuff, or center of the mega-network in the sky, just simple service, connecting people to learn from one another.

Reset: Notes on Alternate Informatics
c/o Mike McCullough
90 E. 7th St., #3A
New York, NY 10009
An informal newsletter about computer and telecommunication grassroots activities. Social uses of the new technology. They, along with the rest of us don’t even know what to call it — informatics, telematics, communication, or something.

The most recent issue included a description of the Apple Computer Company Grants Program and news from a group called Informatics for the Third World, as well as a Sri Lanka microcomputer club.

Uses of Computer and Communication Technologies by Grass-Roots Community Organizations
Timothy Haight, Robert Rubini, Anna Lucia Zornosa
Communication Arts Department
University of Wisconsin
Madison, WI 53706
608/263-3921
Based on a survey conducted by Timothy Haight and colleagues, this is one of the first analyses of uses of computers among citizen action and community-based organizations. It’s just a start, mind you, but it can give you an idea of some of the political, managerial and technical issues community groups using computers are dealing with.
Green Deserts: 

Green Deserts is a small group based in Britain which has for the last eight years been trying to help people in arid lands work out ways of growing their own food, fuel, and fodder while actively enriching the earth of the Earth.

The methods which seem to be emerging center on the reintegration of agriculture, forestry, and animal husbandry into a unified and ecologically-balanced system in which wastes are recycled and natural energies and appropriate technologies are employed. Of course, these ideas are not really new to RAIN readers . . .

But what is unusual is that here is one group which is actually putting the theories to practice and sending research, photo-documentation, educational and agro-forestry teams out on field projects into difficult desert countries. Over the years we've done tree planting in Abu Dhabi, Jordan, Tunisia, and are now working on a long-term project to reclaim and conserve prime cropland along the Nile and Atbara rivers in northern Sudan, in co-operation with the Sudan Government and the Sudan Council of Churches.

Last year, a major expedition was mounted by Green Deserts in which 12 people, six Land Rovers, and literally tons of spare parts were dispatched overland from East Anglia across Europe and down through the Egyptian Sahara to Sudan. The Land Rovers and remaining parts were sold in order to raise enough money to get the projects started. The official British Overseas Development Administration was then convinced to provide matching funds for field expenses to keep things going.

Green Deserts' work in the Sudan centers on three separate but related projects: 1) The improvement of small farms and agro-forestry experimentation within the areas protected by shelterbelts of trees; 2) The introduction of various leguminous tree crops in the unprotected outlying areas to provide additional animal forage and cooking fuel for drought-stricken pastoral nomads; and 3) The setting up of a mobile village agricultural extension service using an entertaining puppet show combined with traditional dancing, singing and story telling to complement courses in tree planting techniques. So far we've had an especially good response from the villagers first visited by the mobile extension unit, and early results from the desert tree planting trials with the herdsmen are encouraging.

Green Deserts is also active in Britain, building public awareness through seminars and audio/visual presentations on a number of environmental topics. Much of the source material for this comes from our own Visual Information Service (VIS), an on-going project to provide planet-wide photo-documentation of the world's deserts and deforested areas and the reclamation efforts underway. Some financial support for our activities is coming from a growing network of members, and a few small businesses run by our core group in rural Suffolk.

Most of our funding, however, is raised during a three day festival known as The Rougham Tree Fair which the Green Deserts group has been organizing every year since 1978. As the most widely attended event of its kind in Europe, the Tree Fair has become famous for bringing a wide variety of musical groups, theatre troupes, and fringe performers of every kind together with one of the finest informal exhibitions of local traditional craftsmanship (weaving, pottery, wood-carving, etc.) to be found anywhere. Beneath all this runs a strong undercurrent of environmental awareness, surfacing in the form of discussions, films, A/Vs, and demonstrations on organic farming, A.T., ecology and of course, trees.

Culturally speaking, the Tree Fair is an important, though casual confluence where the mainstream society can safely splash about in some warm New Age waters without feeling threatened by the rising tide of transformation that is flowing from the future.

While the important issues of nuclear power, disarmament and hunger have been flooding public consciousness, concern for some even more essential basics like
PLANTING FOR OUR VERY LIVES

by David Mulligan

food, air and water — which only trees can guarantee — seems to be sinking out of sight. Let’s hope before more forests become just bits of driftwood in a boiling sea of sand that somewhere below the foam which tops the waves of world awareness will be found a strong groundswell of support to save the plants and trees which feed the Earth. □□

David Mulligan, a Green Deserts Council Member, has been working with the Tunisian Institute for Appropriate Technology since 1978. When we were scouring the globe looking for information on the problem of desertification, he volunteered to write a short article on the work that Green Deserts is doing.

Trees: The Key to Recovery

Dry areas cover about a third of the earth’s land surface. However, much of the remaining two-thirds is unsuitable for agriculture. If we exclude tundra, polar and high mountain regions and consider what percentage of potentially usable land has become desert during the last century, the figures are as follows: In 1872 about 14% was desert; in 1952 this had risen to 33%; and by 1977 it was a staggering 55%. Now, in 1982, almost two-thirds of the usable land on earth has become dry and barren.

The UN estimates that at the present rate of cropland loss and population growth, there will be half as much cropland available to feed each person by the year 2000.

While recognising that there are many ways of approaching the problem of desertification, Green Deserts particularly supports the introduction of tree crop farming systems in arid lands. The beneficial effects of trees in barren or desert areas are many. They enrich the soil while providing protection against erosion, wind-blown sand and scorching sun. The concept of tree crops means that trees can be planted for all of the above benefits, and in addition provide crops of fodder, fuel, food, fibre and other products. This makes tree planting more economically viable than is possible from the mere provision of timber. Once trees have been established and are providing some initial protection (in as little as 2 years), other crops can be introduced in an integrated system of agro-forestry.

Many productive trees are able to grow in marginal arid lands, in particular a number of the drought-resistant legumes. Research is needed into the potential of these and many other promising species. Agricultural and range management systems based around tree crops will be able to sustain rural communities in arid lands, while at the same time improving the soil for future generations. As predicted world food shortages worsen, it is possible that products from currently little-known trees will be accorded substantial importance, providing a much needed economic and ecological boost to many marginal farms.
Our journey through Nile Province, Sudan, convinced us beyond any doubt of the urgent need to communicate to the people living there the importance of trees and to regenerate a respect for and understanding of the direct benefits that tree planting, nurturing and careful management can have on the quality of their lives. We visited an agricultural scheme which is protected by extensive shelter belts of mesquite trees. Immediately outside the shelter belts all plant growth stops dramatically. Then for many miles there is nothing but desert and villages, which obviously had trees fairly recently but which are now practically submerged in sand. Large date palms, dead, and stripped of all accessible wood, are a common sight and it is hard to imagine by looking at the landscape that there ever was enough water to support the pathetically thin strips of fertility.

The resulting situation of a lowered water table making the drawing of water harder and harder, and having to travel further and further for firewood makes life increasingly difficult, particularly for the women. This causes a level of exhaustion just in coping with the most basic survival which would make the extra burden of, for example, watering a tree sapling because of its long term benefits an unlikely priority.

And it is useless planting trees if the goats are immediately grazed on them and they are cut down for firewood. Therefore it is essential that the people who deal with the desert daily really feel that tree planting is going to help them.

There is a strong story-telling tradition in Sudan, so after researching into the Sudanese folklore, we wrote a story using local archetypes and made puppets of all the characters, hoping that we had chosen the right ones. We were pleased to find that whenever we showed the puppets to people we met they seemed to identify readily with them; we decided to try a performance.

We arrived unannounced at Shagalwa village with a forest ranger, five performers, John Agnew of ‘Green Deserts,’ a sack of mesquite seeds, a pile of booklets (compiled by Sudan Council of Churches in simple language with illustrations) about desert reclamation, and a puppet show.

The evening was an extraordinary success. We set up our theatre by the light of the headlamps in an open space in the village, and by the time we were ready to start (about half an hour), around 500 people had materialized from nowhere and were patiently waiting for something to happen.

Set in a village on the edge of the desert suffering from creeping sand, the story was told as follows:

“A lazy boy, Ali, is chastised by his Grandmother, Haboba, for not working in the fields to provide food for them to eat. Ali says that there is no point in his working, as the fields his Grandfather used to work are covered in sand. "Well, go and graze the goat by the trees," Haboba says, but Ali tells her that there is only one tree remaining, the rest having been cut down for firewood. She boxes his ears and sends him out anyway. Ali and the goat go to the only tree, Ali falls asleep in its shade and the goat grazes. The tree groans and complains when the goat nibbles its leaves, scaring it away. Then Abbas al Hatab (woodcutter) enters looking for a tree to fell, but every time he turns to swing his axe the tree dodges out of the way. Unaware of this, he stumbles around cursing, thinking he is losing his aim; he mutters to himself that if he didn’t know that it was impossible he would think that the tree had moved. The goat pops his head up to say that the tree had moved, asking the audience to confirm this. Abbas is now really angry; he swings his axe one more time, but just as he is about to strike, the tree comes to life, revealing itself as a fearful looking ghinn, who grabs him by the neck. He flees in terror.

Alone on the stage the tree speaks to the audience in verse about the benefits of trees and the many uses of wood. Noticing Ali sleeping in the shade, the tree speaks to him in a dream telling him to plant a shelter belt of...
In Sudan

trees around his Grandfather’s fields to protect them from the wind-blown sand; the land will then become usable again. Muttering about his strange dream, Ali awakes and finds mesquite pods dropped by the tree. He goes off, whistling optimistically, to plant them."

The actors put tremendous life into the voices so the audience was laughing at the goat's antics, booing at Abbas, and silent for the tree's poem; a perfect crowd. Before they dispersed, the forest ranger announced that there was to be a discussion, for anyone interested, at the local club.

We met there with a small group of about 25 farmers. The main point that came out of the discussion was that although they had felt life becoming harder with sand covering fertile land, lowering water tables, etc., none of the farmers present had before made the connection between this condition and lack of trees. One man described himself as being terrified at the increasing poverty he was facing. The farmers, on hearing for the first time of the Forest Department’s work in planting shelter belts, asked for a shelter belt for their village. The forest ranger explained that the Forest Department does not have the manpower to cover every village in the desert but if the village could provide the labor then they would provide seeds and practical advice and supervision. An arrangement was made for this to happen.

We left Shagalwa feeling convinced that storytelling, drama and particularly puppets are an ideal means of communicating ideas to people of low literacy level. By presenting a play involving local archetypes, which the villagers readily identified with, we were able to discover very quickly the level of awareness they had of their own environmental problem and its causes. We were also able to reach the women and children who would not have attended a more formal educational exercise. The discussion highlighted how little these people knew of the Forest Department even though the village is very near Shendi and extensive shelter belts have been planted within 25 km. of Shagalwa. The farmers seem unaware of the significance of the work being done. This points to a need for extension work of this sort to communicate to people in their own villages.

The above article was excerpted from Green Deserts Members Magazine, Autumn 1981.

Desertification is a major problem in Northern Ghana where I spent time as a Peace Corps Volunteer. The Johnny Appleseed approach doesn’t go over too well in an area where a growing population has to cut down more and more trees every year in order to have fuel for cooking. There’s also the cultural belief that trees represent the “bush,” a place of disorder and danger; therefore, they must be cleared away so that people will feel safer. It has been estimated that the desert is creeping south into the tropical forests of central Ghana at a rate of 3 miles per year. The challenge we and other village development facilitators faced was to be culturally sensitive when talking to folks about planting trees. For example, we helped them to make the connection that planting trees helped to protect the drinking water dams from wind and soil erosion. Further, if their village can boast of a constant supply of water through the dry season, it will be easier for their young men to convince their wives-to-be to come and live with them. Without that guarantee, the village literally withers away.

— Ann Borquist

From China .

This past spring millions of Chinese citizens began planting trees in a national afforestation drive. Every able-bodied citizen over the age of eleven is expected to plant three to five trees each year in a massive effort to halt the further devastation of China’s limited forests. Considering that the millions of Chinese census takers just counted a billion people in China, that’s a lot of trees.
ACCESS: International Forestry

ORGANIZATIONS

The Africa Tree Center

In a letter to former Rain editor, John Ferrell, R.T. Mazibuko the founder of ATC, shared these thoughts with us.

Dear Mr. Ferrell,

Thank you for your very kind letter. I am indeed glad to make contact with you and your association.

My people have no agricultural tradition as is known in the East and West. We have just come into contact with civilization, education, etc. about 200 years ago.

The rich land of Africa is ruined by soil and soul erosion and exhaustion. Famine is the number one killer; next is malnutrition. To fight all this, I decided to form this organization where each family plants one tree a year. I have to make the presentation very, very attractive and practical to be within the understanding of my people who are 25 million compared with 4½ million whites.

My program includes afforesting hills and mountains and every piece of land that is not for agricultural purposes. We also intend to plant trees and blunt water grasses along river banks.

I am glad to state that my people are responding very, very well. All I require is finances to buy more and more trees to distribute. My friends in Switzerland have made it possible for me to buy one acre of land in order to raise my own young trees. I hope that in seven years I will be in a position to raise more trees than I have to buy.

We of the third world, in fact all the world’s people, should clearly understand that the soil is our topmost gift which we got from God. As you well know, trees can live without man. man cannot live without trees.

Yours Sincerely,
R.T. Mazibuko
Kwa Dlamahlahla
PO Box 90
Plessislaer 4500
Natal, South Africa

The Chipko Movement — People Who Hug the Trees

Chipko, meaning "people who hug the trees," comes from a legend about a village woman named Amrita Devi who had been taught to love and protect the trees as she would her family. One day, the Maharajah sent his men to cut trees for his new palace. Amrita begged the soldiers to take her instead of the trees. "Stand back" they shouted. She refused so they chopped through her body and the bodies of her daughters and 360 other villagers.

The Maharajah was angry when the soldiers returned with so few trees, but when he heard the story, he stopped the work on his new palace and set out the next day to visit Amrita’s village. He was so moved by the willingness of the people to lay down their lives for the trees that he declared a moratorium on tree-cutting near the Chipko villages. And today, the villages are still guarded by their beloved trees, an oasis in a desolate desert.

The Chipko movement appeared in the early 1960s and continues today in its efforts to protect many Himalayan forest areas and to organize national afforestation programs.

Chipko Movement
Dasholi Gram Swrajya
Mandal Gopeshwar District
Chamoli, U.P. INDIA
OTHER ORGANIZATIONS WORKING ON AFFORESTATION

Associacao de Preservacao da Flora e da Fauna
CX Postal 1176 CEP 80.000, Curitiba, Parana, Brazil

Association des Eclaireuses et Eclaireurs de Haute-Volta
BP 2 500, Ouagadougou, Upper Volta

Comprehensive Rural Education,
Social Cultural and Economic Center
G. PO Box 2095, Dacca — 2, Bangladesh

Forestry Association of Nigeria
PO Box 4185, Ibadan, Nigeria

Gambia Scouts Association
PO Box 693, Banjul, The Gambia

Millions of Trees Clubs
c/o Youth Hostels Association of India,
Siragate, Tumkur-Karnataka,
India 572 101

Men of the Trees
Crawley Down, Crawley, Sussex, England

Sociedad Censervacionista Aragua
Aptdo 5115, Maracay, Venezuela

Sociedad Dominicana Para la Conservacion de Recursos
Aptdo 174-2, Santo Domingo, Dominican Republic

Tree Society of Sri Lanka (Ruk Rakaganno)
378/6 Araliya Gardens, Nawala Road,
Rajagiriya, Sri Lanka

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Drive to Turn China Green, Beijing Review, May 1982


Greening the Countryside, Sharma Ravi, 1981, from: Centre for Science and Environment, 807 Vishal Bhawan, 95 Nehru Place, New Delhi, India, 11019

Green Deserts Magazine, Rougham, Bury St. Edmunds, Suffolk IP30 OLY England. $8/year students and senior. Membership includes publication and one living tree held at their nursery until collected or planted.

Green Wall of China, in Development Forum, July/August 1981

Sahel Tragedy, in The Ecologist, July/August 1981.

Social Forestry — No Solution Within the Market, The Ecologist, July/August, 1982

Trees of Life, in Development Forum, July/August 1981.


Undercurrents, Special Issue on Trees and Forests, September 1981

World Rainforest Destruction — The Social Factors, The Ecologist, January/February, 1982

St. Barbe Baker

This year marks the 50th anniversary of Dr. Richard St. Barbe Baker’s founding of the Men of the Trees, an international society of tree enthusiasts started in Kenya. During the 92 years of this remarkable conservationist’s life, St. Barbe Baker pioneered forestry programs in Kenya and Nigeria; devised a plan, later adopted as the Civilian Conservation Corps, to reclaim America’s “Dust Bowl”; led two expeditions through the Sahara encouraging tree planting in 24 African countries to arrest the oncoming desert; and launched a fund to save the redwoods of California. He lectured throughout the world and taught ecological forestry at the University of Saskatchewan.

For World Forestry Day this past March, St. Barbe Baker left us with this message: “If we are to enter the new century with new forests we must start planting now for our very lives.”
SUSTAINABLE AGRICULTURE: A Tradition in West Africa

An interview with David and Mark Freudenberger

Agricultural sustainability is more than a new catchword, it is an objective for realizing a long-term coevolutionary relationship between humans and natural resources wherever one is throughout the world. Yet to many people in the drought-plagued countries of West Africa, sustainability is synonymous with day to day survival, a hope threaded intricately with each moment of living. Two dedicated brothers are challenging us to think more clearly about the conditions for sustainable food production and self-reliant development. David and Mark Freudenberger are of the soil. David was born in Zaire, and Mark has spent over half his life in Africa. Between them, they present their vision of sustainable farming systems which incorporate forestry and wildlife management strategies for West Africa.

Mark recently served as a project agronomist for Catholic Relief Services in Upper Volta. Previously, he worked with the Peace Corps in Togo, and Bread for the World in Washington.


Both David and Mark provide us with a greater familiarity with the land and people of West Africa. They express a reverence for the land and its natural resources, as well as a deep respect for the people who create self-reliant development. Their message is clear. Sustainable and self-reliant development can occur if we take note of where we have been and apply it to where we are going.

—Jim and Rosalind Riker

RAIN: Your work in West Africa has focused on sustainable food production systems of forest and grasslands and wildlife management. Yet this concept of permaculture doesn’t seem to be getting the recognition it deserves. Hasn’t the whole emphasis to date been instead on field crop production, such as millet?

MARK: Yes, most of the research funds are channeled into field crop production and how to increase it. There is very little research on forestry and multiple use of trees, integrated with fuel crop production, animal husbandry, and conservation. When I presented a paper to the U.S. Agency for International Development (AID) and other groups in integrated forestry, they thought it was a great idea but not practical and relevant. I think they are wrong. There are examples that have been tried all over the world which suggest that if you start first on integrating tree crop production into field crop production based on native practices you might be on the right track. Eventually this may supplement or even replace field crop production on poor soils entirely, and lead to a more sustainable system.

RAIN: How do these concepts of integrated farming, forestry and wildlife management apply to local conditions?

DAVID: Keep in mind that cropping has to be structured very much on a micro-regional basis. There is a whole western mentality that farms go from fence line to fence line, over hill and dale. But that just does not work in the African climates and soils. Development must occur on a local basis, recognizing ecological as well as social differences. There might be an incredible diversity within a very small area. You may see a rice paddy that is 3x10 meters and it may do very well though all around it is barren rock.

MARK: I think the marginal lands have to be put into tree crop production and grasses. Then your best land with the deepest soils, the alluvial soils, can be very carefully used for particular types of field crop production, if you can maintain the soil fertility in the long-term. I am not sure that can be done, due to the soil erosion and nutrient depletion of current field crop production.

RAIN: Given the current deterioration of the land, it seems that there is not much which can be based on the traditional agricultural system. Are we moving into a transitional system of agriculture based on the existing conditions?

DAVID: It is transitional in the sense that we cannot go backwards, but I think there is a great deal of value in the traditional knowledge which should not be lost. For instance, western scientists can identify only 16 varieties of millet, while the local villager can identify 54 varieties. That kind of knowledge base, which includes the uses of
these millet varieties and the growing conditions required, would take years for western scientists to figure out. So this knowledge base should be incorporated into the transitional system.

RAIN: How can this rich knowledge base become part of the transitional process?

DAVID: In my particular field of interest, wildlife management, the transition that I believe needs to come about is based on the cultural traditions and wisdom of the villagers. Throughout most of these African countries, game reserves and national parks are being set up as a place for western tourists on photo-taking safaris. I think that game parks are going to have to serve as productive food producing systems as well. The whole cultural system of traditional villages is based upon management of the wildlife in many ways. There is cultural knowledge of various characteristics of the indigenous animals and a taboo system which applies to just about every aspect of game. There are even taboos on how often an elephant may be killed. Therefore, one of the transitional aspects needs to be a new approach to natural resource management, building on these traditional practices regarding the indigenous wildlife.

RAIN: What insights may be gained from traditional African farming systems that can address the current needs of food, fuel, forest and wildlife preservation?

MARK: In terms of the field crop production or the production of food grains, I like to use Wes Jackson's idea that describes how nature is oriented towards the production of polycultures that are perennials, while western agriculture has been oriented towards the production of annuals in monocultures. Monoculture has been the focus of most of the agricultural experiments and research over the past 20 years, but traditional African farming systems were based on polyculture perennials. It integrated a variety of trees and plants to meet the villagers' multiple needs of food, medicines, fibre, fodder, and fuel. In the case of the nitrogen-fixing tree, acacia albida, the nuts are eaten by animals, the wood is very valuable for firewood, and one can plant crops around the tree. We need to look at what these specific traditional technologies were and how they can be adapted to a more intensive and sustainable type of agriculture. I don't think that we can have the illusion that traditional agriculture is necessarily the most productive, but I think it can teach many valuable lessons in our efforts to realize a sustainable agriculture.

DAVID: There is also polyculture in animal production as well. There is definitely an ecological role for a cow, a zebra, or an elephant. It must be seen as part of the multicropping system, using both traditional and domesticated animals.

RAIN: Are governmental agencies, donors, and non-governmental organizations receptive to the permaculture ideas? And are they introducing them by building upon the traditions of villagers?

MARK: This idea of permaculture or agrisilviculture is very new. It is going to take a while before the concept and the practice begin to filter down among government, donor, and non-governmental organizations (NGOs). This is just a little spark. I don't know if the spark has set the forest on fire yet. There are certain agencies that have the foresight and the vision to begin testing. The key is going to be to publicize what is working and what is not. Can these preliminary efforts, in one part of the world, be relevant to another? We have to keep in mind the social, economic, and ecological constraints of each situation.

RAIN: Are the lessons gained from the initial work in development and permaculture being shared so we can build on each other's efforts?

DAVID: There is a great communication gap, particularly when it comes to successes. There are so many agencies, NGOs and levels of government involved in practical efforts that a lot of what happens in the field is not reported, or it is lost altogether.

MARK: Even within one's own agency, it is often extremely difficult to get a hold of information. We are not doing a very good job of sharing information, especially mistakes. Agencies don't like to publicize their project weaknesses, but it is a valuable learning process for each of us. So this, of course is why RAIN and similar publications are so important. The question is: how do you get this information disseminated to those involved in development, especially to the practitioners?

RAIN: Do you believe there is hope of actually establishing sustainable forestry and wildlife management systems given current conditions and trends in West Africa?

MARK: I think that if you are a practitioner, you really don't think about it. If you struggle with the question of whether or not there is hope, I think you'll become very, very discouraged. Rather, you take encouragement in the little victories that appear every day. You realize that time is running out and that you've got to try your hardest.

DAVID: Given certain conditions, change can come about very quickly. Twenty years ago there weren't paved roads or schools in many of the villages I passed through in my travels, which illustrates that things have changed rapidly. We have to keep a historical perspective in mind. Yes, there is a lot that has to be done, but a lot has already been done.

MARK: I think that if you sit back and contemplate the enormity of what has to be done, and you see the insane growth of the ars race, you can be discouraged. We don't have the luxury of getting discouraged. We don't have the luxury of being cynical. Not at all! Certainly as Americans we have been given tremendous opportunities of education, power, wealth, the possibilities for affecting change. I don't believe we can sit back and philosophize about whether or not there is hope. That is doomsday politics. We must get on with the work that needs to be done.
ACCESS: Organizational Development

MAKING A PROFIT AND CHANGING THE WORLD

Planning the Organizational Structure of Business Activities — a Manual for Not-for-Profit Organizations
Center for Urban Economic Development
P.O. Box 4348
Chicago, IL 60680

This manual is oriented toward the nonprofit neighborhood organization that wishes to establish a profit-making enterprise. The manual describes the advantages and disadvantages of different corporate structures, financial, and other business management aspects of setting up a profit making business.

Profit Making by Nonprofits
Grantsmanship Center News
131 S. Grand Ave.
Los Angeles, CA 90015

A two part series appeared in the January/February and March/April (1982) issues of the Grantsmanship Center News, entitled "Profit Making by Nonprofits." It is an excellent introduction to the basic principles of establishing a profit-making business in a nonprofit organization. The series will probably be offered through the Grantsmanship Center's Reprint Series. Write for details.

Business Ventures of Citizen Groups
Charles Cagnon
Northern Rockies Action Group (NRAG)
9 Placer St.
Helena, MT 59601
$5.00, 1982, 50 pp.

Yet another timely gem from NRAG. This publication is based on research conducted by Charles Cagnon on a nationwide tour of citizen groups attempting to develop profitmaking businesses. Cagnon presents a case study of twelve of these organizations, analyzing the reasons for their successes and failures. The rest of the publication consists of small chapters devoted to practical advice, introductory remarks about various aspects of setting up a small business, and guides for citizen groups to follow in choosing a small business. Chapter titles include: Purchasing an Existing Business, Surviving the Learning Curve, Learning to Live with Profit, and Practical Uses of

Chart 1
Sources of Income for Nonprofit Organizations, 1980

From: Corporate Philanthropy

CORPORATE PHILANTHROPY

Corporate Philanthropy, The Business of Giving
Council on Foundations
Fulfillment Service
7212 Lockport Place
Lorton, VA 22079

The volume of literature recently published about corporate philanthropy is an indication of the impact of Reagan policies. Everyone is looking for a new source of funding, and often that new source is the corporation. The Council on Foundations has published an overview of the state of corporate giving and community involvement. The book includes articles on the role of business in community affairs, profiles of corporate contribution professionals, corporate philanthropy in smaller communities, and grantmaking in specific industries. There are also summaries of interviews conducted with corporate executives about their attitude toward philanthropic giving. You can start with this volume and Sternberg's (below) to get a grasp on the field.

National Directory of Corporate Contributions
Sam Sternberg
Regional Young Adult Project
944 Market St., #705
San Francisco, CA 94102
$32.00 (inside California add tax), 1982

This report provides data on more than 600 companies and their philanthropic giving patterns. This is not a typical directory of corporate foundations but a profile of lesser known corporate giving programs. There is some focus on California, but about two thirds of the programs are from outside of California.
ORGANIZATIONAL MANAGEMENT

Merger: Another Path Ahead
Greater New York Fund/United Way
99 Park Avenue
New York, NY 10016

Here is a very timely publication which describes the advantages and the process for merging nonprofit and voluntary organizations. United Way of New York has adapted a policy of encouraging, but not demanding, merger processes for nonprofits as a way of cutting costs and unnecessary duplication of programs. The booklet describes several alternative methods of merging and includes several case studies.

Public Involvement Manual
James L. Creighton
ABT Books
55 Wheeler St.
Cambridge, MA 02138
$19.50 hardcover, 1918, 333 pp.

The Manual is a cookbook for citizen participation, which lays out in a clear, concise manner the hows and whys of structuring a citizen involvement program.

One of the strengths of the manual is the logical, non-threatening manner in which the information is presented. For each participation technique described, Creighton lists its strengths and weaknesses. Not only are the roles of the participants discussed, but also the role of the implementing agency and various participating decision makers.

For citizen activists interested in initiating a participation program, the book may provide guidance in presenting an array of participation techniques to officials for their adoption. But in the cases where bureaucrats are suspect of citizen involvement, the Manual should contain another chapter which would outline techniques for challenging, sensitizing, and convincing public officials and staff that a solid public involvement program will improve the chances of success of a project or program underway.

Grassroots Politics in the 1980s
Institute for the Study of Labor and Economic Crisis
Available from: Synthesis Publications
PO Box 40099
San Francisco, CA 94140
$5.00, 1982, 110 pp.

This is a detailed study of the Tax the Corporation Campaign which was successful in implementing a new tax policy in San Francisco for additional taxing of large corporations. The study is useful for others specifically interested in such a campaign, and the guide has much to say about organizing initiative petition drives in general. It is also a good model for how to put together a profile of such a campaign so that others may benefit from the experience.

The Successful Volunteer Organization
Joan Flanagan
Contemporary Books
180 North Michigan Ave.
Chicago, IL 60601

You'll probably be exhausted after reading Joan Flanagan's book, but you'll know almost everything there is to know about establishing and running a volunteer organization. Based on a questionnaire sent to leaders of five hundred thriving nonprofit organizations and a wealth of personal knowledge, Flanagan designs a comprehensive strategy for getting started and getting results. The book explains how to choose an organizational structure, incorporate, plan programs, hold meetings, choose board members, hire staff, and raise money.

People who would probably benefit most from reading this book would be novice organizers. However, even for an experienced veteran of nonprofit and community organizations the book can prove a valuable refresher.

Keys to the Growth of Neighborhood Development Organizations
Neil Mayer and Jennifer Blake
The Urban Institute
2000 M St., N.W.
Washington, D.C. 20037

This breakthrough into the management and success of nonprofit organizations could be renamed Techniques to Survive and Thrive Even under Reaganomics. Funded by the Department of Housing and Urban Development (HUD), it helped establish the funding criteria for 125 neighborhood development organizations (NDOs) through HUD's Reagan-axed Neighborhood Self-Help Development Program.

The study covers four major topics: Key Characteristics for Success; Stages of Development; Funding Support and Technical Assistance; and Performance Measures.

So many tips from the horse's mouth seem too good to be true inside one cover. One of the most relevant sections is called "Personal Relations with Funding Sources," and details the how-tos of acquiring funds.

ACCESS: Organizational Reviews

Block Grant Coalition
1000 Wisconsin Ave., N.W.
Washington, D.C. 20007
202/333-0822

The Block Grant Coalition is made up of a number of national organizations and state coalitions concerned with the use of the major Federal Revenue sharing process, the Block Grant Program. They are now working with the U.S. Civil Rights Commission to assess the impact of Block Grant Programs at the state and local levels. The coalition is also developing model legislation for implementing Block Grant Programs which can be adapted by states to match their local conditions.

A publication, The Block Grant Briefing Book, and a regular newsletter are also published by the Coalition.

National Center for Appropriate Technology (NCAT)
P.O. Box 3838
Butte, MT 59702

The National Center for Appropriate Technology was recently saved from going the way of its now defunct parent agency, the Community Services Ad-
Conservation and Renewable Energy Inquiry
and Referral Service
Renewable Energy Information
PO Box 8900
Silver Springs, MD 20907
800/523-2929

The hotline supported by the U.S. Department of Energy is still offering basic information and referral for questions relating to wind, biomass, alcohol fuels, photovoltaics, active and passive solar heating, cooling, and energy conservation.

Independent Sector
1828 L St. N.W., Suite 1200
Washington, D.C. 20036
202/223-8100

Started in March of 1980 by John Gardner, founder of Common Cause, this coalition resulted from the merging of the National Council on Philanthropy and the Coalition of National Volunteer Organizations. The alliance of corporate and 300 volunteer members provides a unique meeting ground for the common interests of volunteer organizations and corporate funding.

The group has sponsored Gallup Polls on trends and issues, worked on new legislation allowing non-itemizing taxpayers to deduct for charitable contributions, and published research reports on the status of nonprofit organizational activities.

Mary Malecha, editor of their in-house bi-monthly publication, Corporate Philanthropy, believes the corporations are willing to offer assistance, but, she admitted, "I don't see them in any way being able to make up the present gap."

Annual membership cost is based on the size of the organization, starting at $100. Besides the above services, benefits include a bi-weekly newsletter that reports on developments in government agendas and Congress that affect volunteer and nonprofit groups.

People of the Earth and the Earth Island Institute
Friends of the Earth
1405 Sansome Street
San Francisco, CA 94111

David Brower and friends at the Friends of the Earth in San Francisco have created the Earth Island Institute to expose people to the need for global conservation awareness. Although still in its embryonic stage, Earth Island's objectives include both coordinating and teaching classes and sponsoring conferences. Their State of the Earth conference on conservation and global security, held this October 19-21 in New York City, was well-received and attended by 800 people.

The People of the Earth Project, sponsored by Friends of the Earth Foundation, began in October 1981 in response to the degradation of indigenous people throughout the world. They are presently concentrating their efforts to produce an international directory of organizations and support groups to strengthen the growing network of people dedicated to the preservation of indigenous cultures. The directory should be completed by mid-1983.

Pacific Studies Center
867 W. Dana Street, #204
Mountain View, CA 94041
415/969-1545

The Center has operated as a nonprofit "activist-oriented" information center for the past ten years. Some of its work recently has focused on the structure, as well as the social/economic consequences of the electronic industries. It has published several reports and issues a regular newsletter, The Global Electronics Information Newsletter ($5/yr), which reports on such things as the Korean silicon wafer industry, and toxic waste problems in Silicon Valley.

The Center also provides research assistance for a fee, including background information on corporate business activities.

Local Initiatives Support Foundation (LISC)
660 Third Ave., 14th Floor
New York, NY 10017
212/949-8560

LISC provides support to community development organizations through low-interest loans, grants and technical assistance. The orientation is toward gaining private sector involvement. Loans are made to facilitate other commercial loans, and grants must be matched dollar-for-dollar from the private sector.

Technical assistance is tailored to encourage and assist the local organization in achieving the business discipline needed to raise and invest their own funds more effectively.

LISC was started in 1980 with half of its initial $9.5 million in funding coming from the Ford Foundation and the other half from six national corporations.

So far LISC programs have received more than 100 corporate and 50 foundation contributions. LISC's capital base has grown from its original $9.5 million to $28 million with almost all of it coming from the private sector.

LISC has so far limited its program to working with already successful and skilled community-based development organizations that are seeking to improve the physical and economic conditions of their communities.

It will take more time to judge LISC's success; however, its approach is right for the 1980s with less reliance on government funding and the focus on private initiative and local programming.

Integral House Projects Network
Jeff Ball
PO Box 169
Springfield, PA 19064

Jeff Ball of Suburban Homesteads, Inc., an integral house project in Springfield, Pennsylvania, has compiled a list of twenty projects in the U.S. and Canada, including Portland's Eliot Energy House. The purpose of Jeff's directory is to form a communication network among the members of the projects, so they can compare notes and share ideas.

A spin-off of his work with integral house projects is a network of eight suburban property owners in several eastern states who have volunteered their time and property to try out ideas like integral housing and alternative gardening techniques.

To receive a copy of the directory of integral houses around the country send a stamped envelope with $3.00 to Jeff Ball.

Planning and Management Assistance Project (PAMAP)
1705 DeSales Street, N.W., Suite 401
Washington, D.C. 20036
202/659-1963

PAMAP provides consultant support to nonprofit, "social purpose" groups to help them clarify their goals, strengthen their structures and management, resolve internal conflicts, and implement new policies. They work with groups all over the country, and there is no charge for an initial meeting.

They have a number of brief papers on organizational development topics. Single copies are available free. One entitled Passages: Organizational Life Cycles, which was also published on Conserve Neighborhoods (May-June 982), is an excellent description of typical stages in the growth and development of most organizations. Other titles include: The Board of Directors of Nonprofit Organizations, Common Organizational Problems, The Board of Directors Is a Problem,' and No Board Is Like Any Other.

Industrial Cooperative Association
249 Elm Street
Somerville, MA 02144
617/628-7330

Steve Dawson, ICA director, describes
their goal as the “legitimatizing of the idea of worker ownership, to show that it can be an efficient, realistic way of running a business.”

ICA has provided technical assistance to over fifty worker owned and controlled businesses throughout the country in the past four years. They began by helping workers take over plants that were closing down. They are also converting healthy firms to cooperative ownership and are starting new enterprises.

The nine-member staff provides assistance in every area needed to start a business, which includes writing a business plan, targeting markets, drawing up by-laws and legal papers, and securing loans.

One example of a firm they launched is the worker-owned Sewing Company, Inc., the 40-member garment manufacturing company made up primarily of women in Windsor, North Carolina, one of the poorest counties in the nation.

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Edible Plants
The planet is believed to contain 80,000 edible plants, yet only about 150 have ever been cultivated on a large scale, and less than 20 produce 90% of the world’s food.

That’s Hard to Swallow
Harvard law professor Roger Fisher has proposed stuffing into a tiny capsule the secret codes that the President must invoke to initiate a nuclear attack, and then implanting the capsule near the heart of a volunteer. In order to obtain the vital codes, the President himself would have to physically remove the capsule with a knife, thus reminding him of the reality of the decision he was making.

Burning the Candle at Both Ends
A citizen of an advanced industrialized nation in six months consumes the energy and raw materials that have to last the citizen of a developing country his entire lifetime. (Maurice F. Strong)

Nonprofit Economics
There are an estimated 7 million nonprofit organizations representing $129 billion dollars of the annual US economy. 80% of all adults contribute to them and over a quarter of the adult population gives volunteer time through them.

Solar Talking Gravestone
Stephen Zelzany and Michael O’Pilea have invented a solar talking tombstone. Each gravestone is equipped with a small speaker and tape recorder powered by a solar panel. The cost is $10,000, and it has a 40 year warranty.

Cost of Living Items Disclosed
When governments quote “cost of living” increases, they base their figures on the price fluctuations of selected consumer items. For undisclosed reasons, the Canadian government has dropped girdles and cloth baby diapers from its list of key items. Perhaps this is Trudeau’s way of encouraging citizens to hang loose in hard times?

Economics of Tofu and Tempeh
Over 100 new tofu factories have been launched in the U.S. in the last four years. Today 154 plants produce 45.9 million pounds of tofu worth $50.3 million in retail sales. At least 988,000 pounds of tempeh, worth $1.7 million in sales, are produced by 32 American tempeh plants. Soy delis, which are a new breed of fast food, soy and natural foods based cafe/take outs, serve more than a million dollars in ready-to-eat soyfoods at 13 locations.

Swimming Through the Recession
The National Spa and Pool Institute reports that while housing starts are dipping toward depression levels, pool starts have been moving right along. Pool construction fell by 3% during the 1974 recession, but last year (1981) pools were off by only 2%; and orders for 1982 are holding firm. Some top-of-the-line companies even report that demand is up.

Toast of the Gretrude Stein Club
According to Human Events, a conservative tabloid, Walter Mondale has become the “toast of the lesbians and gays, consensus choice of the Gretrude Stein Democratic Club.”

Exxon Education
Exxon has been actively distributing several films to show their side of the energy situation. And working quite well thank you. A before and after test indicates that before a film on energy, only 19% of the students thought oil companies were doing a good job solving the energy problem, while afterwards the figure jumped to 46%.

Computerized Abuse
For about $20 you can give an Atari or Apple II the personality of your worst enemy with some software created by the Don’t Ask Software Company. It asks you absurdly complicated questions like “How many workers are there in a Dole pineapple plantation picking crew, not including the swamper?” And if you can’t answer it you get random verbal abuse like “Why don’t you go moon a flock of geese?”

The War Lingers On
Twenty five percent of all inmates in US prisons —100,000— are Vietnam Vets, and the suicide rate among Vietnam vets is 33% higher than the national average.
Every week brings us new sample periodicals. Someone else has added us to their mailing list. Sometimes there is a note tucked away, "Want to exchange?", or "For review?", and we don't find the note until weeks later. Sometimes we wonder why there are so many. Ulrich's directory of 60,000 periodicals probably just scratches the surface. In this country, a more accurate count might be had by compiling the work orders of all the fast print outlets.

Beyond the world of mass media periodicals — as supplied in uniform manner to almost every minute-mart in the country — there are scores of periodicals which you will seldom find on a magazine rack. Many are available only by subscription and some use the traditional alternative distribution system, the laundromat or co-op window ledge.

In this first periodical review section we have compiled a guide to the periodical world itself. In future issues we will continue to review new noteworthy publications as well as describe the patterns we notice of types of periodicals. In the next issue we will be describing what we call bio-regional publications. Any suggestions?

— Editors

REFERENCE GUIDES

Ulrich's International Periodicals Directory
RR Bowker Company
PO Box 1807
Ann Arbor, MI 48106

Over 60,000 periodicals are described in this well-established directory. Other companion pieces include Irregular Serials and Annuals (1982, $62.50, 1542 pages) and updates through Ulrich's Quarterly periodical.

New Pages Guide to Alternative Periodicals
Casey Hill
New Pages
4426 S Belsay Road
Grand Blanc, MI 48439

This is a directory to a selection of periodicals ranging from spiritual transformation, women's rights, alternative energy and social justice. Over 100 are described and surprisingly many are still with us. New Pages, publishers of the directory also publish New Pages, a bi-monthly journal that reviews books and periodicals.

Alternative Press Syndicate Membership Directory
Alternative Press Syndicate
Box 3347, Ansonia Station
New York, NY 10023
212/974-1990
$2.00, 1982, 23pp.

Profile of about 200 member newspapers, with 20 million in circulation. Each profile includes ad rates, circulation, when founded, style and editorial content.

International Directory of Little Magazines and Small Presses
Len Fulton
Dustbooks
PO Box 1056
Paradise, CA 95969

This is the basic guide for locating small presses and publishers with a literary bent.

Whole Again Resource Guide
Tim Ryan, Rae Jappinen
SourceNet
PO Box 6767
Santa Barbara, CA 93111

This publication (soon to be published) promises to be a companion piece to Stamps & Lipnack's Networking: First Report and Directory. There is some duplication between the two. The primary distinction is that the SourceNet directory focuses on publications. There are dozens (upon dozens) of periodicals described. In carefully looking through the alternative energy selections we've found several periodicals that have stopped publishing, but it is difficult to peg that world in a directory and SourceNet's
The focus is on European publications. New Periodicals Index takes a worthy stab at the matter. SourceNet also makes available periodical names on mailing labels at $35/1000.

INDICES TO ARTICLES

Alternative Press Index
Alternative Press Center
Box 7229
Baltimore, MD 21218
quarterly, $25/yr

The oldest index to alternative periodicals. It focuses on social change and political issues.

Alternative Press Index

Atindex
John Noyce editor
Box 450
Brighton E. Sussex
England BN1 8GR

An index to articles appearing in over 20 periodicals about appropriate technology. The focus is on European publications but includes several American periodicals.

New Periodicals Index
Mediaworks, Ltd.
PO Box 4494
Boulder, CO 80306

$25/year. An index to periodical articles appearing in about 75 periodicals. The orientation here is more "whole earth," "new age," or transformational than the political Alternative Press Index.

Norg Working Bibliography on Neighborhood Issues
Paula C. Baker, et al.
Neighborhood Organization Research Group
Workshop in Political Theory and Policy Analysis
Indiana University
814 East Third Street
Bloomington, IN 47405

First published in March 1981, with periodic updates since, this is a very useful indexing service, indexing journals that cover community development and neighborhood issues. Covers books, reports and periodical articles.

MAILING LISTS

There are mailing list clearinghouses which can provide you with mailing lists for periodicals in the country; however, they may miss some of the best ones. In addition to the SourceNet mailing list (mentioned above), Renewal, Mark Satin's journal which recently stopped publishing, offers a mailing list of 1500 periodicals which he subtiles, "the world's longest list of New Age, progressive, feminist, environmental, futurist, alternative, etc. periodicals." The list is available on self-adhesive labels for $62.50 (20% off if you are a "movement" group).

PERIODICAL REVIEWS

Foundation Grants Index Bimonthly
The Foundation Center
888 Seventh Ave.
New York, NY 10010
bi-monthly, $20/yr.

For ten years the Foundation Grants Index has been published inside the Council on Foundation's Foundation News. It is now an independent publication with the same basic feature of describing grants awarded by major foundations in the United States. The Bimonthly, which will begin January 1983, will also describe books, brochures, reports, speeches, articles on philanthropy, grants, non-profit management, etc. This along with the Grantsmanship Center News and Foundation News would just about cover it. Hope they can equitably divide up the pie.

Turning Point
Spring Cottage, 9 New Road
Ironbridge, Shropshire
England TF8 7AU

Turning Point is an international network of people whose individual concerns about health, energy, the environment, economics, etc., are published twice a year in this newsletter. The ad hoc committee of members offers ideas for taking stock and rethinking the BIG issues. "We aim to convey a sense of this process of change, and how people can take part in it." The committee relates the names of people, projects, books, and events with descriptions to encourage individuals and groups to contact one another for mutual aid.

Grassroots Fundraising Journal
PO Box 14754
San Francisco, CA 94110-0754
bi-monthly, $15/yr

A new bright, well-timed journal reporting on methods and tools for nonprofit community-based social change organizations to become more financially and administratively self-reliant. Articles about foundations, promotion, how to form working boards, direct mail appeals, high income/low labor costs events and much more.

Resource Recycling
928 Second Street
Sacramento, CA 95814
bi-monthly, $18/yr

A new magazine devoted to different aspects of recycling. One issue contained a survey of the nation's mandatory recycling ordinances. Other articles are promised about decline and fall of insulators, the offshore scrap iron controversy, state investment credits for recycling equipment. Edited by Jerry Powell recycled by California from Oregon, and one of Oregon's most effective recycling policy watchers.

From: Transformation News

Transformation News: A Journal of Synthesis
188 Old Street
London, England ECI
quarterly, $7/yr

Quite sophisticated in writing quality and black and white graphics, this quarterly reports on activities of groups worldwide working to change common values into those suited for a positive future. It draws together global concerns, appropriate technology, developments within this planetary network, the arts, news of specific networks, a London page, publications, projects, events, and classified ads. The writers provide an abundance of access information throughout; articles vary from a half to a full page. A creatively sincere source of cultural midwifery.

New Times: The Positive News Journal
188 Old Street
London, England ECI
$13.50/yr

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WALLOWING IN DEVELOPMENT

The Loss of Ecological Information

What has happened in our honest attempts to do research that genuinely serves the people of the Third World, is that we have often failed to see the ripples of our actions in the sea of development.

by Jim Riker

It is becoming increasingly apparent that we must explore the interplay between the ecological, social, economic, and cultural environments of Third World villages in order to offer any insight about development. Our understandings of the complex relationships and circumstances which characterize the needs of Third World villages remain inadequate to capture their dynamic interactions. Yet, valuable information is contained in the complementary relationships which exist between people and their natural environment. In fact, scientists and technical experts working on development questions have begun to re-examine the inherent wisdom of traditional technologies and natural systems indigenous to the Third World as possibilities for sound and sustainable development. Most importantly, there has been the increasing realization that biological entities and technologies, appropriate or not, often cannot be transplanted from one setting to the next without presenting some adverse results. Consideration of the context in which development is occurring is crucial. Experience in development shows that loss of the ecological dynamics is occurring, thus emphasizing the need for a context specific science which recognizes these dynamics. Rather than relying solely on conventional approaches to development, it is time to evaluate the intended purpose behind the research which is dedicated to serving the people of developing countries.

One of the latest approaches to direct science and technology towards serving development is by the Board on Science and Technology for International Development (BOSTID), a research arm of the U.S. National Academy of Sciences. The expressed purpose of BOSTID is to examine "the ways in which science and technology can stimulate and complement the complex process of
social and economic development.” One of the primary ways in which BOSTID does this is to “conduct special studies” on topics that hold particular widespread promise for developing countries such as renewable and alternative energy technologies for rural development, the potential of the winged bean as a nutritious crop for the tropics, and the possibilities presented by the water buffalo for development. Though these topics are relevant and need more research, BOSTID’s research is narrow in its intent and purpose. It fails to adequately envision the development process in an integrated manner. Their research approach removes the subject from its context. Thus, the circumstances which shape the subject’s interactions and performance in its environment are ignored or lost altogether. What has happened in our honest attempts to do research that genuinely serves the people of the Third World is that we have often failed to see the ripples of our actions in the sea of development. The effects of our involvement in development need to be closely examined, especially in terms of what is gained and lost by the introduction of new biological species or technologies into a particular setting.

In the case of the water buffalo, BOSTID’s report “The Water Buffalo: New Prospects for an Underutilized Animal” has identified the unexploited potential of the water buffalo in a technical manner within and outside its native habitat. The analysis is guided by Western notions of purpose and strategy, examining each individual productive facet of the water buffalo as a distinct possibility for economic development such as milk or meat production. This information is valuable for what it is, but it does not serve the intended purpose of truly “complementing” the development process in a village. Synthesis is not required of the BOSTID approach. This is a perfect example of non-integrated research: studying all of the water buffalo’s attributes, but not how the water buffalo fits into the scheme of things.

The water buffalo’s real significance remains hidden until one considers the relationship of the water buffalo to the welfare of the farmer and his family as well as to the villages throughout Asia. It is this element which is noticeably missing from BOSTID’s scientific framework and analysis. One of the most distinctive characteristics of the water buffalo mentioned in BOSTID’s report is its need to spend time submerged in pools of water, known as buffalo wallows. These are often located on the edge of the agricultural fields. BOSTID’s report concedes that the water buffalo’s wallowing nature is considered a drawback to its adaptability to diverse agricultural circumstances. Yet, BOSTID notes that research has demonstrated that wallowing is not necessary if adequate shade is readily available. Thus, the possibility of adapting the water buffalo to the conditions of other countries is presumed. BOSTID’s focus is on expanding the use of the water buffalo beyond traditional settings, neglecting the multiple roles the animal plays within that context. However, the natural linkages surrounding the water buffalo which exist in the village ecosystem and the tremendous benefits which follow must be considered.

In Sri Lanka, Dr. Ranil Senanayake, of the National Heritage Trust, is documenting the significance of the water buffalo and the wallow in Sri Lanka’s rice agriculture. The water buffalo has been an integral part of the Sri Lankan rice agroecosystem for over 1400 years. Over time, biological and ecological relationships with the rice agroecosystem have evolved. Buffalo wallows are a common feature in Sri Lanka, usually located at the bottom of a series of rice fields at some distance from a river or other perennial source of water capable of being used by water buffaloes. The buffalo wallow is more than just a pool where the water buffalo immerses itself; it provides a suitable habitat for many beneficial organisms. When the dry season comes, the wallow remains the only refuge for these organisms. Fish which grow in the warm water of the rice paddy get trapped in the pools during the dry season and are easily caught. Aquatic fauna which grows in the paddies dies out in the drought, remaining only in the wallow to recolonize the paddies when the rains come. The wallow supports insectivorous fish, the first to

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recolonize the paddy field. These fish restrict the population of the malarial mosquito. The wallow provides a suitable habitat for the breeding of the non-venomous rat snake, which eats as many as 20 rats and mice a month. The water monitor lizard also requires the habitat provided by the wallow. The lizard eats poisonous snakes and crabs, the latter of which burrow holes in the bunds (retaining walls) of the rice field, causing the field to lose its water retention ability. In this case, a farmer has to spend several days repairing the bunds each season. A final use of the buffalo wallow is as a soaking pool for coconut fronds to be braided into roofing thatch. The dry fronds need to soak for two to three weeks before they're pliable enough to braid into cajun. Within the buffalo wallow lies ecological information which assists in the regulation of the rice agroecosystem. If the significance of the buffalo wallow and its ecological relationships is not fully understood, then often this information is likely to be lost, never to be considered for its merit.

Examples abound which attest to the loss of valuable ecological information as traditional systems of agriculture are being altered and abandoned throughout the world. All too often, our approaches to development fail to consider the ecological information, the dynamic interactions and relationships of an ecosystem, which traditionally characterize Third World patterns of living, and hence, village life. The wisdom inherent in these patterns of life may be more fully appreciated in a science which deals with the specific nature and characteristics of the traditional system under study. We must recognize the context in which development can logically occur. Dr. Senanayake contends that: "If present trends continue, the traditional agricultural system of Sri Lanka will soon disappear like the buffalo wallow, and with it all the information that could be utilized in the design of a low energy, sustainable method of agriculture. Can humanity afford such losses?" Once we change the integrity of the physical system, the information it contains is irretrievable. Our approach to scientific research is of no value or relevance in the Third World unless it can begin to preserve the physical environment and capture the essential qualities and dynamics of rural village life. In a sense, we are losing the ecological resiliency of evolved natural systems, only to be replaced by crude and simplistic counterparts which are often incompatible with local circumstances. We must have a scientific paradigm which includes these ecological principles to guide our understanding of development in a more complete sense. Only in this way can the real learning process begin as research findings relate more closely to the patterns of living which uniquely define each Third World community. The time has come to realize science's full potential in serving the needs of people of the Third World. A context specific science is a step in that direction.

Jim Riker and his wife, Roz, were interns at the Rain house this last summer. They spent last year in Sri Lanka as part of their studies at the University of California at Davis. Currently, they are helping to put together the Institute of Sustainability.
A Way of Working
D.M. Dooling
1979, 127 pp., $3.50 paper, from: Anchor Press/ Doubleday
Garden City, NY 11530

The values embraced by the workforce today — both in labor and the services sector — present a clear contrast to those of even a decade ago. Whereas work values previously focused on the highest paying and the most prestigious positions, studies show a new set of personal values are setting a context for redefining the meaning of work. A 1977 Harris poll showed some 80 percent of the people hoped that society would choose human values over material values. Rather than increasing productivity, a majority indicated they preferred attaining inner rewards from work.

Current trends in worker desires reflect this shift towards values of work autonomy: flexible work schedules, opportunities for creativity, worker participation in management, choice and change in job roles, greater job fulfillment, whole health maintenance, and a harmonious work environment.

This book conveys a fresh sense of direction that our work and vocations seem to be taking. The seven contributors to A Way of Working help articulate a lost value of work as craft, work as a spiritually directed activity, gaining its motivation from a higher source than a plant foreman.

Simone Weil, author of The Need for Roots, concluded prior to her death in 1943, “Our age has its own particular civilization founded upon the spiritual nature of work.” Although A Way of Working speaks to its reader on a very personal level, this provocative book can help bring us a little closer to that civilization.

—Kris Nelson

Mechanization of Work
Scientific American
PO Box 5919
New York, NY 10164
September 1982, $2.00

This special issue on the mechanization of work contains several good articles that focus on the state of mechanization in various areas of society with such wondrous statements as, “More than 80 percent of U.S. mineral needs are met by less than one percent of the labor force.” Articles include descriptions of mechanization in agriculture, commerce, design and manufacturing, office work, and

ACCESS: Working

“women’s work.”

Economist Wassely Leontief notes in the article “The Distribution of Work and Income” that technology is replacing the human workforce, first through肌肉-saving machines, and now through intellectual machines. Since the start of the industrial revolution, machines have done more work, leaving less work for people. As a result, there has been a steady shortening of the work week, so that remaining work can be shared. But since 1950, the work week has remained at about 42 hours, and unemployment has steadily risen. Leontief suggests that further sharing of remaining work must occur if our society is to survive.

—Carlos Portela

New Work Schedules for a Changing Society
Jerome Roscow, Director of Study
1981, 128pp., From: Work in America Institute, Inc.
700 White Plains Rd.
Scarsdale, NY 10583

This report clearly outlines the entire range of new work arrangements for the 1980s, offering fifty recommendations that include the following: flexitime (employees choose their starting and quitting times); variable day (work of variable durations per day with contract for total number of hours in a week or month); flexiplace (changes in the location and schedule of work); permanent part time employment; job sharing; work sharing (instead of layoffs, temporary reduction in working hours); and compressed work weeks (reallocating work time over the week).

One section discusses the community benefits from such alternatives to the standard nine-to-five, including fuel savings and reduction in air pollution.

Radical Career Change: Life Beyond Work
David Krantz
The Free Press
866 Third Ave.
New York, NY 10022

When was the last time you considered leaving your present work for a completely different occupation? If you’re like many, including myself, the idea of starting anew, doing something inwardly satisfying, pops up as often as the new moon. Quite frankly, I would love to become a beekeeper and potter about now.

Focusing on white, middle-class pro-

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professionals, Krantz describes how and why some successful people left home for a new life and career. The book focuses on individuals living in Santa Fe, New Mexico. Krantz established three requirements for potential individuals to be included in his book: people who had been working at least five years before coming to Santa Fe; people who had established new careers with lowered status and lower income; and people who had made the change under substantial financial risk.

Career changing, however, is not all laid-back and tea-sippin'. One section, "The Costs of Changing," gets past the glamour and describes the struggles, both economic and psychological, of crash career changes.

More than a collection of stories, this book neatly weaves together the deeper questions of inner happiness, personal incompleteness, and outside responsibility. Where "responsibilities" (children, colleagues, the life of an organization, etc.) often had prevented serious consideration to change, "the experience of the radical career changer suggests that choice is more open and that responsibility, while real and important, need not be a deterrent to finding a better life."

— Kris Nelson

**Opportunities in Environmental Careers**

Odom Fanning

1981, 150pp., $5.95, softcover from: National Textbook Co. 8259 Niles Center Rd. Skokie, IL 60077

Written by the former editor-in-chief of Environmental Quality, the first annual report of the Council on Environmental Quality, this is a basic textbook about environmental careers. A wide variety of job opportunities are covered with addresses of major employers, a chapter on colleges, and one on predicting future environmental job trends. The descriptions of environmental job possibilities are broken down into four areas: ecology, biology, and chemistry; environmental health; resources and recreation; and land use and human settlements.

The book lacks some awareness about critical environmental issues. For instance, in the three pages about soil conservationists and eight pages on agriculture (mostly agribusiness) there is no mention of America's current topsoil crisis and any innovative new jobs which would alleviate the situation.

— Carlos Portela

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**In Business Magazine**

bimonthly, $13.95/yr (and)

**Sideline Business Newsletter**

(monthly, $30/yr)

JG Press

PO Box 323

Emmaus, PA 18049

In Business fills an important gap between social values and small business management. As with other publications of JG Press, founded by Jerry Goldstein and others who left Rodale (Press), In Business is high quality work.

The magazine feels orderly (as any small business should be) and substantial. The featured articles are often introductions to aspects of business management — Plotting Your Break Even Point, or How Safe is Your Business Name. Some of the articles describe specific small businesses or opportunities for new businesses. For example, one recent issue highlighted soy foods producers. Sometimes the articles just describe a unique way of operating — a glassblower who uses water power to generate electricity.

The on-going articles about computer hardware and software choices for small businesses are good introductions to the field.

Regular departments include review of new publications and new government policies affecting small businesses. Another light feature is a regular photo essay on new signs used by small businesses.

There is a fine line that In Business straddles between small is enough and big is too much, between the profit motive and social change motive, or between free enterprise that degrades the environment, and free enterprise that enhances the environment. Fortunately, in most cases, In Business comes down on the right side of the line by seeking to inform people about right livelihood while keeping social and environmental compacts in place.

Sideline Business is a newsletter that complements JG Press' In Business magazine. It is a chuck-full, relatively small (8 pages) newsletter directed at the freelance, part time entrepreneur, with ideas for developing small businesses and ways to earn a little on the side.

— Steve Johnson
This is the single most valuable tool for finding employment or internships with socially responsible nonprofit organizations anywhere in the United States.

As a monthly access journal, it is concise, up-to-date, and pleasantly positive for the job seeker, networker, or supporter of the cooperative/nonprofit movement. Besides thorough listings of job openings by geographical region, it highlights issues surrounding social change, provides interviews with key change agents, and reviews the struggles and successes of nonprofit organizations. Like RAIN, Community Jobs briefs upcoming events, new publications and resources; it specializes in how-to guides: Canvass Organizing and Fighting Housing Displacement are two recent examples. You can also advertise yourself in the classified section for ten cents per word.

In looking over the range of jobs offered nationwide, another use of the versatile periodical occurred to me. If you’re interested in abortion rights or organic farming, environmental issues or community organizing, you’re located in the untamed West (like Portland, Oregon), and want to connect with similar groups in the South (or wherever), simply read over the sketch of the organization offering the position.

One piece of warning. Most of these jobs won’t make you rich, monetarily that is. The salaries rarely exceed $18,000 per year, and most range from $4,000 to $12,000. The inner rewards, however, may rival your expectations; many of the opportunities cater to self-directed, motivated individuals.

(We have used Community Jobs several times to solicit applications for RAIN intern positions. Always a fascinating lot of people who respond to the ads!)
lower cost services, a nonprofit support group such as the Council can reduce the percentage of funding directed at basic operating support and free up more money for an organization's basic programs.

Co-op America
2100 M St., N.W., Suite 316
Washington, D.C. 20036
202/872-5307

Co-op America is a national membership association and buying club for socially responsible businesses, non-profits and co-ops. It is, itself, cooperatively owned by its Organizational and Consumer members. The purpose of Co-op America is to strengthen and expand the progressive, environmentally concerned, and personally exploratory segment of the American marketplace by acting as a "middleperson," brokering the goods and services of its member organizations and businesses, and providing direct support services and/or referrals to other support services useful to its membership.

Co-op America grew out of a task force on Economic Democracy convened in the Spring of 1979 by Jim Gibbons of Consumers United Group, a worker-owned and managed business specializing in group health and life insurance, and the efforts of Community Futures, a nonprofit consulting corporation based in Massachusetts. The task force brought together representatives of some of the strongest cooperative and democratically managed businesses in the country. Among the problems articulated were the lack of an ongoing association of concerned businesses, and the difficulty in reaching a wider market for products and services.

From this need expressed by the task force grew the embryonic vision of Co-op America, a co-op of co-ops or a collective mail order business for small businesses and nonprofits who work cooperatively and share a vision about social and environmental justice on the planet.

In one of the earlier packets from Co-op America some of the possible services and products the Co-op might offer were listed as:

"socially responsible investment, group health and term life insurance, magazines, books, records and cassettes, travel, education, workshops and conferences, job openings, housing, donations to causes, crafts, clothing, furniture, toys, food, consumer goods, recreation equipment, energy efficient products, information on self-reliance, community development and organization."

And why not? There are, we know, thousands of small businesses, cooperatives and nonprofits, and by many accounts at least 20 million people who might be potential consumers of high quality and morally right goods and services.

The Co-op today is already brokering group health and life insurance through Workers Insurance Trust and Consumers United Insurance Company; a money market fund; management consulting; free job listings in Community Jobs; computer services, including discounts on hardware and software; and other discounts.

There are some issues raised by this new meta-level in cooperation. The brokering of something complex like computer systems is not the same as developing a catalog of hand-crafted goods. Co-op America could probably act as a middle person for any number of shoe manufacturers, but how many different computer services, or other services where a customer's needs are very complex, can it adequately serve?

And what happens to regional independence if we become reliant in centralized clearinghouses and national promotion schemes? Will some cooperatives tend to get stronger through being able to out-sell or out-promote a smaller local cooperative or business?

Co-op America can do its best work in areas of the country where there as of yet fewer choices for consumers who do want to show their political convictions with their dollars. It will also serve a vital role in brokering scarce goods and services, especially some management support services needed by all cooperatives, small businesses and nonprofits.

Anyway you look at it, Co-op America has made its point loud and clear.

It will be interesting to see in which ways Co-op America grows. One thing is clear, that Co-op America is a product of the times—a bold gesture that indicates the size and potential of the cooperative movement, even if only that the idea was generated, whether or not in the long run, it works as envisioned.

RESOURCE SHARING NETWORKS—A READING LIST


The most recent in this line of barter books is What'll You Take for It? (Annie Proulx, Garden Way Publishing, Charlotte, VT 05445, 1981, 138 pp. $5.95). It is more about rural life and bartering in a cooperative community setting. Only a brief section of the book is devoted to bartering as a business activity.

The first annual Northeast Washington Harvest Festival and Barter Days was held in 1974 near Lake Chelan. In a new periodical out of the Okanogan area, The Okanogan Natural News, Michael Pilarski, one of the originators of the festival, gives its history and a description of its development, (P.O. Box 139, Tonasket, WA 98855). (Send donation if requesting a copy.)

The Volunteer Skillbank: An Innovative Way to Connect Individual Talents to Community Needs
From: Volunteer: National Center for Citizen Involvement
Box 1807
Boulder, CO 80306
$5.00

This guide contains findings from the Mott Foundation-funded skill bank project which assisted in the development of several voluntary skill banks around the country. The Center also has Minimax, a barter game that encourages participants to share information and skills ($22.95). Their Exchange Newsletter is one of the few regular sources of information about self-help and community resource sharing activities around the country. Includes information on funding, sources of technical assistance, and useful publications.

The Barter Network
930 Tamalpais Avenue
San Rafael, CA 94901
415-457-8630
$5.00

This several-year old barter network also offers a packet of material on organizing a skill and bartering exchange.

The Skills Exchange
R. Kay Fletcher, Stephen B. Fawcett
Center for Public Affairs
University of Kansas
Lawrence, KS 66045

This is a manual similar to the Ashland Skill Exchange manual, based on experiences of the authors in setting one up in Lawrence, Kansas.
How To Organize a Skill Exchange
From: Skillsbank
340 S. Pioneer
Ashland, OR 97520
$3.50

Includes information about how to raise money, create the right public information, and organize the information about skills.

Natural Helping Networks
Diane Pancoast, Alice H. Collins
National Association of Social Workers
1425 H. St. NW, Suite 600, Washington, D.C. 20005
$6.50 paper, 1976

An exploration of the idea of using natural social networks of friendships and good neighbors as interpersonal and community support networks. The Regional Research Institute at Portland State University (PO Box 751, Portland, OR 97207), is continuing its study of self-help activities based in part on this original study.

Helping Networks: How People Cope with Problems in the Urban Community
The Community Effectiveness Institute
2233 Delaware Street, Ann Arbor, MI 48103
(313)/665-5206

A study of natural helping networks in neighborhood settings. Through information gathered in Pittsburgh and Detroit, the authors describe a variety of roles people play as natural helpers and discusses the potential of natural helpers in providing community services, building community trust, and forming a new political base.

Challenge of the Resource Exchange Network
Seymour B. Sarason, Elizabeth Lorentz
Jossey-Bass Publishers
433 California St., San Francisco, CA 94104
$13.95, 1979, 283 pp.

This book, and another similar one, Human Services and Resource Networks (Jossey-Bass, 1977), provide many useful insights into the development of resource sharing among community organizations, a process the authors feel may be one of the most effective means to assure the survival of the nonprofit sector in years to come. This volume includes case studies of the Toronto Skill Exchange, Boston Self-Help Center, and Homeworkers Organized for More Employment in Orland, Maine.
Efforts by development agencies to assist countries improve their water supplies are limited by the political context in which they operate.

No matter how you state it, much of the world is hungry. As our population increases from four to six billion through the year 2000, the need for positive solutions is becoming even more pressing. In the long run, the solution is not to import food from countries with surpluses, but to increase food production within developing nations. The Brandt Commission, an independent commission on international development headed by former West German Chancellor Willy Brandt, stated that of the many barriers to increasing food production “the most fundamental difficulty is the control and management of water.” From a technical standpoint, this is an accurate statement. But when considering the broader social and political context in which food is grown, the issue is not so much how to control the water as it is who controls the water.

In response to the problem of food production worldwide, irrigation issues have become increasingly important. Erik Eckholm, in Losing Ground, explains, “One of the key factors permitting world food output to keep up with surging postwar demand has been the historically unprecedented explosion in irrigation capacity... growing faster than world population so far this century.” The world’s total irrigated land has nearly doubled since 1950 from 110 million hectares (1 hectare equals 2.5 acres) to 200 million hectares in 1975. The great advantage of irrigation is that farmers are protected from unpredictable weather or arid climates. Once water is available all year round, farmers can improve planning of their crops, be more flexible in their choice of crops, farm more intensively, and be more inclined to adopt improved farming techniques.

However there are several problems associated with irrigated cropland: salt accumulation, severe erosion from deforestation, and silt build-up in waterways due to cultivation of poor soil. Pakistan’s Mangla Reservoir began operation in 1967 with a life expectancy of one hundred years. After only a few years, however, measurements showed that most of its water-holding capacity will be replaced by sediment in seventy-five years. In
some coastal regions of Libya where irrigated farming is supported by tapping groundwater, the water table is falling at a rate of nine to ten feet a year. The aquifers cannot be refilled at this rate, and there is mounting danger of salt water contamination, leaving the groundwater useless for irrigation.

To increase food production, which is so desperately needed in Third World countries, the Brandt Commission correctly identified the key element: the control and management of water. At the technical level, the development of environmentally sound irrigation projects is a complex and challenging task. Yet technical solutions are only a part of the answer. In fact, the most difficult problems are social and political, as we have learned from past water projects. In the 1950s and ’60s, dozens of big dams were built in developing nations and were considered to be a sign of progress, potentially attracting industrial development. Experience shows, however, that the initial cost has far outweighed the resulting benefits.

There are many problems with large-scale water and irrigation projects. Often the primary motivation for such a project was the production of hydro-electric power to stimulate industrial development. This approach was based on a traditional model of development in which developing countries were encouraged to imitate Western “trickle down” economics. Agricultural development was often a secondary concern. Due to poor planning, even technically successful projects have had many unforeseen drawbacks, both environmental and social. Large-scale projects are also difficult to manage. The ever-present problems of coordination and conflict can be worked out in small groups, but, while problems can be resolved in large scale projects, more communication and transportation technology is required than is available in developing countries.

A major reason for the emphasis on large-scale water projects is that they are preferred by multi-lateral and national development agencies, such as the World Bank and the U.S. Agency for International Development (USAID). Large scale projects are impressive to see and appear to be a good investment, which helps when requesting funds for the next fiscal year. Expenses for large projects are easy to account for, while spending a small amount on a number of projects involves too much paperwork and increases administrative costs. These agencies usually focus narrowly on technical solutions and from that point of view more irrigation means more food. This approach allows them to avoid the politically sensitive and more important issues of who benefits from the improved management of water, which is generally large landowners and not the rural poor.

The purpose of an irrigation project should be to assist the rural poor, who make up most of the population, to grow food for themselves and to increase their production and income. Small-scale projects are more likely to succeed in this goal. They allow for the primary ingredient: participation at the local level. Sartaj Aziz summarizes the issue well, in Clean Water for All, by stating, “The most important aspect of the water problem is the human problem. Until we are able to organize the people who are going to use this water, we will not be able to use water effectively. A great deal of the water development strategy of the future will depend not on the very large capital-intensive plans, but on very small and medium scale irrigation programmes and flood protection and drainage systems that different communities can develop by using their surplus labor.”

In recent years, multi-lateral and national development agencies have recognized the importance of local participation. The lesson was learned the hard way when many projects were abandoned when their funding ended, all because people did not feel a sense of ownership of the project. Unfortunately, recognition of the need for local participation does not ensure that it will always happen.

An example of the problem is described by Betsy Hartman and James Boyce who spent nine months in a Bangladesh village. World Bank aid, channelled through the Bangladesh government, reached their village in the form of a deep tubewell, one of 3,000 installed in Northwestern Bangladesh. On paper, the World Bank’s plan encouraged the peasants to form a democratic cooperative and submit a proposal for the well. In fact, a tubewell designed to serve 25 to 50 farmers became the personal property of one man, the biggest landlord of the area. He paid less than $300, apparently a bribe, for a well that cost the donors and the government $12,000 to build. According to Hartman and Boyce, he says he will let neighboring farmers use his water but he intends to charge a price too high for most to afford it.

Curious as to why the richest man in the village should receive World Bank aid, Hartman and Boyce talked to a foreign expert working on the project who explained, “I no longer ask who is getting the well. I know what the answer will be and I don’t want to hear it. One hundred percent of these wells are going to the big boys. . . . First priority goes to those with political clout: judges, the magistrates, the members of parliament, union chairmen. If any are left over, the local authorities auction them off. The rich landlords compete, and whoever offers the biggest bribe gets the tubewell.”

This case clearly illustrates that while providing water may have increased food production capability, it did not reduce hunger. The wealthy landowner can increase his production and his income, but the rural poor have neither the money to buy food nor the water needed to grow their own. Such disparities persist since those who control the land generally control the water supplies. It is not uncommon for 70 to 80 percent of rural families to be

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landless or near landless. While most developing countries have introduced land reform programs, only a few have been successful because most did not significantly change the broader economic and political structures that determine the way resources are distributed.

It is not necessary to go to Asia to observe large landowners receiving the benefits of public irrigation water. In the United States, the 1902 Reclamation Act provided irrigation water to owner-operated family-sized farms in 17 western states. While the legislation was generally effective, many individuals and corporations, such as Tenneco and Southern Pacific Railroad, own thousands of acres of land which receive large subsidies in the form of cheap water — at taxpayers’ expense. Although the situation was protested by National Land for People, a small farmers organization, Congress recently passed legislation which allows continuation of the subsidies for these large landowners.

Efforts by development agencies to assist countries to improve their water supplies are limited by the political context in which they operate. An effective redistribution of resources, such as land or water, involves addressing issues of economic and political power, whether it is in the United States or a developing nation. Making major reforms that are intended to restore or enable equity in development projects will be very difficult.

Despite these limitations there are still many opportunities in the Third World for development projects that can reduce hunger and malnutrition. The most promising model of development is based on self-help and local participation. This participation means that people are no longer the subjects of development plans, but are active agents in their own development.

There are many examples of successful development projects based on the principles of self-help and local participation. In the Matam region of Senegal, French development agencies have worked at the village level with farmers to develop an irrigation system. The average plot is 18 acres, and the farmers have increased both their production and income. They are organized to continue the project through a Producers Group which has over 1,330 members. For a detailed example of another self-help water project in Ghana, see RAIN Volume VIII, Number 9.

Initial data and examples about self-help development projects are being collected and analyzed. Indications are that the rural poor, working together, have the ability to direct their own development. As they start a project, they often find that they know more and can do more than they realized. Their self-confidence grows, organizational skills improve, and they begin to work on other areas of community life that need development. The process does not require massive assistance. But this type of development is slower than others. Some local development planners say it can take up to ten years for a project to become self-sustaining. Westerners are generally too impatient for this approach, but the reality is that effective development takes time. With land, water, and encouragement, the best hope for ending hunger is the determination and talents of the people who are now hungry.

— Some of the material used in this article originally appeared in Hunger Notes, published by World Hunger Education Service (see access).

Rob Baird is currently one of our co-Administrators. Before joining us, he worked with the World Hunger Education Service and the Maryland Food Committee.

### BIBLIOGRAPHY

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### ACCESS

#### ORGANIZATIONS


For additional books, organizations and journals on international development, see RAIN Volume VIII No. 3.
Oregon High Desert Museum

After five years of planning and development the Oregon High Desert Museum opened its doors to the public in May. The museum, which features walk-through exhibits of native desert wildlife and plant life will also be offering a continuous run of special exhibits and education programs. In October the Museum featured an exhibit of Edward S. Curtis historic photos of Northwest Indians. (High Desert Museum, 59800 S. Highway 97, Bend, OR 97702, 503/382-4754)

Small Woodlot Economics

A $2 million investment in 1980 by the Federal government in programs to help small woodland owners in Oregon grow timber will produce 5400 jobs and $645 million worth of value when that timber is harvested, according to an Oregon State Department of Forestry report.

Consumer Cooperatives Managers Association Conference, (CCMA) Seattle

CCMA held their annual meeting in Seattle in June 1982. The general report on the state of consumer cooperatives was somewhat gloomy with the market showing little growth in 1981. Some of the large issues brought out at the conference were the problem of an inadequate pool of co-op managerial expertise, undercapitalization and high operating costs. This conference was also the first where representatives from smaller “new wave” co-ops were represented in substantial numbers.

Report on the Portland Community Congress

About 300 activists gathered October 9 for the Portland Community Congress, designed to build links between a wide range of community organizations.

The gathering was organized into issue groups ranging from food systems to families and neighborhood self-determination. Prior to the Congress, members of the groups had met to develop two-year action plans which were discussed and refined in meetings at the Congress. As a result, a number of groups will continue working on their issues as city-wide coalitions.

Sponsored by the Alliance for Social Change, the theme of the Congress was “When things get bad, people need to reach for new levels of cooperation.”

A highlight of the Congress was a speech by Mike Rotkin, the socialist-feminist mayor of Santa Cruz, California, where a progressive socialist majority nearly runs the city. Rotkin emphasized the basic importance of organizing neighborhoods around the issues that concern the people there, and then translating that organized strength into electoral victories.

Rotkin also noted that in Santa Cruz the local government is beginning to create municipal enterprises such as alternative revenue sources. Last summer, a surfboard and umbrella rental program paid for the city lifeguard program. Under consideration are a city-owned hotel complex, a public takeover of a privately owned cable system, and formation of a city fire insurance plan. The latter two could yield up to $20 million annually for the city. Contact the Alliance at 519 SW 3rd, Rm. 810, Portland, OR 97204, 503/222-4479.

— Pat Mazza

Guardian Angels

Through the sponsorship of the Burnside Community Council and persistence of Michael Stoops, Portland now has a chapter of the Guardian Angels, the well-known voluntary citizen safety and security patrol started in New York City. In the first two days the project received over 60 volunteers. In total, 200 people of both sexes and a variety of ethnic groups applied to become part of the new group. Of that 200 about 90 will be accepted for training and about one out of eight of those will be ready to patrol the streets sometime in February. For more information contact Michael Stoops, Burnside Community Council, 313 East Burnside, Portland, OR 97214

Mien Agriculture Project Update

The Mien, a Southeast Asian ethnic group from Laos, have grown so many vegetables on their community garden plots in Portland that all they have to buy is “salt and meat.” Presently, they are learning how to grow crops all year round — a new concept to them. Contact RAIN for more information.
Edible City Project
The Edible City Project has been established by PACT (Portland Action Committees Together) to locate, identify, and utilize produce-bearing trees and shrubs within six inner southeast neighborhoods in Portland. For more information contact: Midge Tarbutton, PACT, 3534 SE Main, Portland, OR 97214, 503/233-8491.

Tilth Moves to Portland
In a move to locate its office more centrally in the region, Tilth, (a Northwest regional agricultural association), is moving to Portland and into the RAIN house. This may hold some promising interactions for both groups which trace their relationship back to 1974 when they were both founded. It is hoped the groups will be able to share resources, including libraries, and that the region can benefit from this alliance of an urban and a rural information center.

Conservation Act Coalition
In response to a mandate by the Northwest Regional Power Act that a twenty-year energy plan be written for the region, the Northwest Conservation Act Coalition has prepared and presented to the Power Council, the overseers of the Northwest Regional Power Act, a “Model Electric Power and Conservation Plan for the Pacific Northwest.” The Coalition, comprised of 37 environmental, ratepayer, labor and other citizen groups, by putting forth the model plan, is working to ensure that the conservation and renewable resource priorities of the Act are implemented as intended. For copies of the model plan, or information on local organizing efforts, contact the Coalition Director Mark Reis, 1516 Melrose Ave./P.O. Box 20458, Seattle, WA 98102.

Urban Agriculture Park
The Neighborhood House in Seattle has begun an urban agriculture park on a 3-acre site called the Allen Morris Hillside Garden Park, located in a public housing community. They presently have 40 family garden plots and a 2,400 square foot passive solar greenhouse situated on a south-facing hill. The greenhouse is planned to support a combination of community horticulture activities and a small business to raise revenue for the project. They are currently looking for information that will help them make effective use of the greenhouse. Contact Rebecca Sadinsky, Neighborhood House, Inc., 905 Spruce Street, Seattle, WA 98104, 206/447-4520.

Home Resource Center
The Home Resource Center is a community self-help center in southeast Portland, operated by Portland Action Committees Together (PACT). The goal of the Center is to develop a skilled, hard-working and self-reliant community whose members are able to assist each other in meeting common survival needs. The Center has a tool lending library with a variety of useful tools for loan, including a rototiller, a food dryer, and a sewing machine. The Center also sponsors classes in home repair and carpentry, and, along with the WEB Energy Co-op, they provide weatherization education and assistance.

Solar Energy Association of Oregon
The Solar Energy Association of Oregon (SEA of O) has hired a director, Allen Brown, and he has opened its office at 2637 SW Water Avenue, Portland, OR 97201. 503/224-SUNS. (See summary of Solar 82 for one of the Association’s major activities lately)

Self Help in Seattle
The Inner City Self Help Program of the Central Area Motivation Program in Seattle, the inheritor of the Community Action Agency’s Community Action Program, offers a variety of programs designed to help people help themselves. The Program offers classes and workshops on various aspects of home repair and energy conservation. Tools to help residents do their own house repair and energy conservation are available through the Tool Bank which lends out an average of 100 tools per month. To encourage people to share skills and resources, the program has established the Labor Exchange, modeled after the Northend Rehab Co-op skills exchange operating successfully for several years in North Seattle.
The Labor Exchange presently has 300 members. And finally, to make use of usable recycled building materials, *Rebound* collects donated materials and makes them available to low income residents and nonprofit organizations. For more information about the Inner City Self-Help Program, write to 722 18th Ave., Seattle, WA 98122 (202) 324-0500.

**Tools for the Unemployed**

Facing up to some futurists' prediction that full-employment is only a dream, people have begun to organize around assisting the unemployed and underemployed with means to survive. Mt. Hood Community College, in Gresham, Oregon, recently sponsored a conference “Moving Ahead: Options for Unemployed Workers” with workshops on job training programs, coping with unemployment, and other career possibilities. Also, the Legal Services Corporation has been sponsoring conferences for low-income individuals, aimed at providing information about self-reliance and other methods of economic survival. One conference took place in Albany in November, featuring workshops on skill and barter exchanges, small business possibilities, cooperatives, forming community economic development corporations, impact of plant closures, and creating neighborhood jobs.

**Shared Housing**

The Shared Housing Project of the Tri-County Community Council and the Center for Urban Education, inspired by the Stevens Homesharing Program in Seattle, matches potential tenants and home owners. It facilitates the transaction between the two through matching needs and desires of the parties. Since May 1982, the program has received 350 applications, and 250 applicants have been provided with potential matches. The emphasis of the matches has been on senior-citizens. RAIN recently assisted the group in developing a computerized database to make the rather complex referrals easier. (Shared Housing Program, Tri-County Community Council, 718 W Burnside, Portland, OR 97209.

**Solar 82 Conference**

Solar 82, a regional conference on renewable energy, took on a monumental task — and succeeded. Organized by the RAIN Community Resource under contract with the Solar Energy Association of Oregon, it lit up Portland State University September 30 through October 2. Representatives from public and private utilities, the solar and renewable energy industry — including manufacturers, designers, and builders — government, and renewable energy organizations participated in the event.

The hottest topic centered around the implementation of the conservation and renewables portion of the Northwest Regional Power Act.

Workshops covered state-of-the-art in conservation, solar, and other renewables, such as wind, micro-hydro, geothermal, and biomass. Current utility programs and energy needs of industry were also evaluated. Here especially, a spirit of friendly discussion emerged among energy activists, decision makers, and energy professionals.

At the First Annual Solar Awards Banquet, Joel Schatz, cultural repairman and former director of the Oregon Office of Energy Research and Planning, challenged the audience and awarded recipients with timely thoughts. He urged people to seize every opportunity to help others see the contribution solar energy is making for a peaceful world.

To obtain a copy of the Solar 82 Workshop Summaries (112pp), send $2.50 to Solar 82 Summary, Rain Community Resource Center, 2270 NW Irving, Portland, OR 97210.

**Bicycling Resources**

Two small newsletters for bicycling activities in Oregon have recently come to our attention. *Bicyclists Speak Out!* is the newsletter of the Tri-County Bicyclists United, a group working to bring better bicycling conditions into the greater Portland area. *The Cycling Alternative Network* is working on bettering bicycling conditions in the Eugene area through bike pathway cleanups and other public educational events. (Tri-County Bicyclists United, PO Box 14075, Portland, OR 97214; Cycling Alternatives Network, PO Box 121, Eugene, OR 97440.

**Bicycling Encouragement Program, Portland**

The first phase of the Portland Bicycling Encouragement Program, a project funded by a $174,000 Federal grant, and administered by the Metropolitan Service District, will begin May 15th. The program has been controversial following an *Oregonian* editorial which challenged the wisdom of the use of these funds. In response to that, the program will be implemented in gradual stages. The first phase will be an extensive survey of Portland area residents about their attitudes toward bicycling as a transportation option, followed by a public education campaign and an employer incentive program. More information is available from: Metropolitan Service District, 527 SW Hall, Portland, OR 97201.
This brief publication describes self-help projects supported by the Community Food and Nutrition Programs, which were in part, until recently, supported by Federal money. The directory describes quite a collection of innovative self-help projects—all shape and size of gleaning and food bank projects, food buying clubs and community gardens, a food preservation equipment lending library and more.

For Consumer Activists
From: POWER
419 Security Bldg.
Olympia, WA 98501
$5.00 prepaid, 1982, 54pp.

While this guide is especially useful for Washington residents, it also covers the effects and potentials of the Northwest Power Act and the Public Utilities Regulatory Policies Act (PURPA). Perhaps the most valuable section outlines a step-by-step approach for ratepayers and citizen groups to organize a productive rate campaign in any state. There is also a “campaign checklist.” Each campaign step is referenced with background information found elsewhere in the guide.

Food Buying Groups in Greater Portland
Kathleen Cornett, Mary Kieman
Portland Action Committees Together, Inc. (PACT)
(and) Earthtone Magazine
3534 S.E. Main Street
Portland, OR 97214

This is a nicely done summary of the process for setting up a food buying club, down to the level of specific local regulations, as well as a directory to Portland area food wholesalers and food buying clubs.

How Does Your Utility Rate
Solar Washington
Sept./Oct. 1982 issue, $1.50

This issue of Solar Washington has a detailed analysis of utility companies in Washington, including descriptions of their energy conservation and renewable energy programs, and the method for public input into decision-making.

Oregon Self-Help Projects
Rick Rhoades
Mid-Columbia Community Action, Inc.
312 E. 4th Street
The Dalles, OR 97058

Oregon State Legislative Research in Progress
Legislative Research
S420 State Capitol
Salem, OR 97310
503/378-8871

The Legislative Research Office has announced research in progress upon request by state legislators for the following topics:
- Monitor legislation in other states regarding religious cults
- Compare federal and state licensing low head hydro applications
- Evaluate activities in other states that encourage cottage industries, including zoning and land use laws
- Develop a profile of salaries paid in Oregon industries
- Evaluate the Department of Environmental Quality’s capability to encourage new growth

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Oregon Guide to Media Services
The Media Project
PO Box 4093
Portland, OR 97208
$5.00, 1981, 42 pp.

This is a very useful directory to media services in Oregon, including listings for public relations agencies, a variety of production services and technicians, animation, cinematographers, editors, special effects, video production, sound studios, still photographers, unions, and labor organizations. The directory is well designed and easy to use. The 1983 edition is up and coming, and the Media Project is accepting ads and directory entries now, (prepublication special 1983 edition, $4.00).

The Media Project also offers films of Northwest filmmakers for rent. Their catalog of films is available for the writing. At last word they were offering a discount up to 50% on film rentals.

Food Salvage Guide
Oregon Food Share
718 W. Burnside
Portland, OR 97209
$5.00, 1982

A comprehensive guide on how to develop a food salvage or gleaning project.

Lane County Groups Register
Eugene Switchboard Inc.
795 Willamette
Eugene, OR 97401
503/342-HELP
$6.00, 1982

The register is a list of 865 groups in Lane County that includes neighborhood groups, unions, education groups, human service deliverers, cooperative corporations and support groups. The list is also available in mailing label form for $25.95.

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ADVERTISING

RAIN Advertising Policy and Rates

RAIN now accepts both classifieds and display ads. All ads are accepted at RAIN's discretion. The advertising of services and products in RAIN should not be considered an endorsement. RAIN is not responsible for product claims and representations. Deadline for receipt of ad copy for the Feb/Mar issue is December 21; for the Apr/May issue is February 16. Prepayment is required.

Displayed Ads: Rates for display ads are:
- full page (7-1/4 x 9-7/8), $200;
- half-page (4-5/8 x 7-1/4), $125;
- one-fourth page (3-1/2 x 4-5/8), $65;
- one-eighth page (2-1/4 x 3-1/2), $35.

Classified Ads: Rates for classified ads are 30¢ per word. Letter groups (as in acronyms) and number groups (as in addresses or price information) count as one word; hyphenated words count as two words. Ads must be submitted to us in typewritten or very clearly hand printed form.

For more information contact: Advertising dept., RAIN, 2270 NW Irving, Portland, OR 97210, 503/227-5110.

Worthy Work: RAIN is offering special rates for job and internship classified ads. The cost of worthy work ads will regularly be 15¢ per word for profit making organizations and 10¢ per word for non-profits. In our next two issues, we have a special initiation rate of 10¢ per word for profit and 5¢ for non-profits groups. Each worthy work ad should not exceed 100 words to receive this special rate. For further details on classified ads see "RAIN Advertising Policy and Rates."

A New Vision for Agriculture

"The Future Is Abundant is the most carefully detailed and timely guide to sustainable agriculture available. While it is designed for the Pacific Northwest bioregion, it is filled with information of equal value to other bioregions. If you're a land lover, you'll love this book. The Future Is Abundant is a practical catalog filled with hope."—Carlotta Collette, RAIN Magazine

The Future Is Abundant is the first sourcebook for natural farming and permaculture in North America. It is the first complete guide to the wide range of tools and techniques now available for creating a sustainable agriculture and forestry.

CONTENTS INCLUDE:
- PLANT SPECIES INDEX—330 species indexed by form, habitat, soil, and uses: food, wildlife, hedges, etc.
- SEED & PLANT DIRECTORY—Over 130 leading seed and plant sources.
- ANNOTATED BIBLIOGRAPHY—Over 600 sources of current information.
- INFORMATIVE ESSAYS—No-till farming, agricultural ecology, forestry, and much, much more.

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* * 2270-R NW Irving, Portland, OR 97210.

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Portland, Oregon 97207

GOT THE BAD-NEWS BLUES?
Are reports of bigger bombs, shrinking social services, and Moral Majority crusades getting you down? Are your favorite left-wing magazines in Reagan-esque gloom?
Well, there is an alternative! For 16 years, one magazine has followed the people who are doing something about war, poverty and injustice. Draft resisters, antinuclear protesters, Indian activists, the Anti-Klan Network—these are just a few of the people who appear on the pages of WIN Magazine every two weeks. Subscribe to WIN and get the good news about the growing nonviolent movement for social change.
Subscribe today and beat the bad-news blues! Send $20 for a year (12 issues) of WIN ($25 Canada or overseas), or $11 for a 6-month taste, or $11 for a sample copy. Send your name and address with a check or money order to WIN/Dept. 326 Livingston St./Brooklyn, NY 11217.

THE DISARMAMENT CALENDAR for 1983
Published by the Syracuse Cultural Workers Project
PHOTOGRAPHS FROM THE GROWING INTERNATIONAL DISARMAMENT MOVEMENT INCLUDING WEST GERMANY, THE USSR AND ENGLAND AND WITH SPECIAL EMPHASIS ON THE JUNE 12, 1982 NEW YORK CITY MARCH
By mail $6.50 each, 3 for $17. We'll send gift cards. In stores $5 each; 3 for $14. Wholesale rates available to groups, bookstores, coops, etc. All orders prepaid please.
THE DISARMAMENT CALENDAR for 1983
PO Box 6367 -R, Syracuse NY 13217 (315) 474-1132

CLASSIFIEDS

SELF-RELIANCE AND FUTURES TAPES: Tapes from the Options Northwest Conference (June 17-20), available: Karl Hess (90 minutes, $5.50); Stephanie Mills (60 minutes, $4.00), Ed Lindaman, futurist, (90 minutes, $5.50), Dan Evans, Northwest Power Council Chairperson, (60 minutes, $4.00). Write to Net Works, Evergreen State College, CAB 305, Olympia, WA 98505.


SARATOGA COMMUNITY GARDEN APPRENTICESHIP PROGRAM: Yearround apprenticeships in biodynamic/French-Intensive Gardening; bio-intensive floriculture, and school gardening and environmental education programs. For more information contact: Saratoga Community Garden, P.O. Box 756, Saratoga, CA 95070 (408) 354-8648.

STAFF POSITION ILLINOIS SOUTH PROJECT: Collectively-run public interest organization. The job includes organizing, research, advocacy on coal development issues. One year public interest experience necessary. $13,000 + benefits. Write to: 116 1/2 West Cherry, Herrin, IL 62948.


MAGAZINE FOR HOMESTEADERS! Covering small stock, gardening and much, much more. Send stamp for additional information or $8 (1 year). Money back guarantee! Farming Uncle (r), Box 91-E46, Liberty, NY 12754.


TILTH INTERNSHIPS: Tilth is a nonprofit organization devoted to developing a sustainable agriculture for the Pacific Northwest. Two internships are available. Bookkeeper/Order Filler: Will keep daily books, fill orders and produce monthly and quarterly financial statements. Requires financial and managerial experience. Executive Assistant: Will open, route and answer mail, file, answer phones, design and implement office management systems. Requires ability to write and type correspondence, ability to manage time and willingness to work with a computer. The stipend for both is $20/month for a 30 hour week. After 4 months a raise can be negotiated. To apply send a brief handwritten cover letter explaining interest in position and resume to Barbara Snyder, Tilth, 2270 NW Irving, Portland, OR 97210.
Appropriate Technology Center in Illinois Planned — A study to determine the feasibility of creating a rural center of appropriate energy and agricultural technologies has been initiated by the Illinois Natural History Survey, a division of the Department of Energy and Natural Resources. Offered as a gift to the State of Illinois by Dave and Jane Fletcher, the site for the proposed Illinois Appropriate Technology and Education Center is at Jade Acres, near Salem, Illinois. For more information contact: Robert W. Gorden, State Natural History Survey Division, 407 East Peabody Drive, Champaign, IL 61820/217/333-6880.

Consumer Co-Operative Development Corporation — The articles of incorporation of the proposed Co-op Bank development subsidiary, the Consumer Co-operative Development Corporation, are available from the Information Office of the Co-op Bank, 1630 Connecticut Ave., N.W., Washington, D.C. 20009, or call 800/424-2481 toll free.

Employee Cooperatives — A new law in Massachusetts will facilitate the formation of employee cooperatives. The statute gives employee-owned businesses a dependable legal framework which protects their members' rights. Copies of the law from: Rep. Timothy Bassett, Rm. 43, State House, Boston, MA 02123.

Health and Crime Prevention — Medical Self-Care, the excellent journal published by Tom Ferguson, recently had the boldness to make what should be a fairly simple observation that being mugged or raped is unhealthy. The Summer 1982 issue of the journal has several good articles on health and crime prevention; from the point of view of a healthy physical and psychological perspective.

Biogas Bibliography — Biogas from Agricultural and Other Wastes, a Subject Bibliography, is available from Gregg Shaduck, Mid-American Solar Energy Complex, 8140 26th Ave., S., Minneapolis, MN 55420, which covers research literature from mid-1940s to early 1981, listing 2760 citations.

Community Self-Help — Resurgence Magazine is compiling information for a special issue about community self-help, appropriate technology, communitarian, new age, and peace movements in the U.S.

Consumer Affairs — The Consumer Resource Handbook has been compiled by the U.S. Office of Consumer Affairs and is available from the Consumer Information Center, Pueblo, CO 81009. The Handbook gives names and addresses of federal, state, and local consumer agencies.

Alternative Education Opportunities — The August 1982 issue of New Age Magazine had an interesting selection of alternative degree programs around the country.

Control Data — Develop Data Base is Control Data's newest entry into the information era. A database like their previous Technolec, this one has online access to international developments in such areas as water, energy and power, housing, infrastructures, agriculture, and food production.

Historic Preservation — Getting to Know Your Early Twentieth Century Neighborhood is a nice guidebook which emphasizes how to read the architecture of a period, compiled by Conserve Neighborhoods, National Trust for Historic Preservation 1785 Massachusetts Ave., NW, Washington, DC 20036. Free.

Housing and the Environment — Environmental Action, showing great insight into the interrelatedness of things, has published a special issue of their journal on housing, which at first glance might seem to be an unlikely environmental topic, but there are several important relationships, including the demand for timber to meet housing needs. (September 1982 issue)

Independence: A Self-Reliance Digest — It was a surprise to be thinking about the demise of the Institute for Local Self Reliance's Self Reliance Journal when we received in the mail an announcement for a new publication called, Independence: A Self-Reliance Digest. Hummm? It looks like somewhere between Consumer Reports, Survival Tomorrow, and Changing Times. "Buy a house in the city for $1... or build your own solar home in a rural area for less than $15,000"... "How to analyze the profit potential of any investment."

Solar Energy and National Security — The Solar Lobby (1001 Connecticut Ave., NW, Suite 510, Washington, D.C.) has drafted its SENSE Plan, Solar Energy National Security and Employment Act, a comprehensive and innovative measure to be introduced to Congress, which would create thousands of jobs, improve our environment, and insure our national security. The full text of the Act will be printed in Sun Times.

Solar Energy in California — According to a report form the California Office of Appropriate Technology, the California solar collector business employs 21,000 people, and there are 1500 businesses, with an additional 5,500 companies involved in the solar industry in some way.
Organizing Events — Community Events, and How to Organize Them is a short publication available from Conserve Neighbors, for neighborhood groups and others wanting to organize community events. Free from Conserve Neighbors, National Trust for Historic Preservation, 1785 Massachusetts Ave., N.W., Washington, D.C. 20036.

Women's Issues — Have you recently read any good material with a feminist perspective, gone to any great women's gatherings, heard any new ideas involving women's issues? If so let us hear from you. We hope to publish something in RAIN about the women's movement and how feminism affects our lives.

LOCAL ENERGY DIRECTORIES

California Energy Networks, a directory of local energy groups, from the Office of Appropriate Technology, 1600 Ninth Street, Sacramento, CA 95814.

Minnesota Sun Funds: A Resource Directory, from the Minnesota Public Interest Research Group, 2412 University Ave., SE, Minneapolis, MN 55414. $3.50, 1982.


Philadelphia Solar Directory — is a comprehensive directory to solar energy resources in the Philadelphia area, compiled by the Philadelphia Solar Energy Association (2233 Gray's Ferry Avenue, Philadelphia, PA 19146). The directory describes over 180 solar installations in the area and resources for solar energy development. It is 280 pages and costs $7.50 in a spiral notebook format.

Montana Environmental Congress — Montana's first Conservation Congress took place in mid-September with 120 people attending representing more than 40 environmental organizations to develop a blueprint for working together for a prosperous future for Montana. (PO Box 961, Helena, MT 92624).

CALENDAR

The Government of Mexico is hosting the first exposition on housing technology, TECNOVIT, which will take place in the Centro De Exposiciones "Tollocan-Habitat," in Mexico City — coordinated by the Ministry of Human Settlements and Public Works. The focus of the exposition will be on low-cost housing construction techniques. Information and exhibitions are being invited for this exposition to be held January 27 through February 6. For more information contact: Arq. Abel Ibanez, Instituto AURIS, Parque Orizaba #7, Piso 8, Naucalpan De Juarez, Estado De Mexico, Mexico 905/576-0048.

The World Future Society is sponsoring a conference in Dallas, Texas, on Linking Educational Partners: Schools, Families, Businesses, Communities, Media. It is an attempt to integrate the institutions that provide lifelong learning in our culture. The conference is scheduled for February 13-16. For more information contact: Kathryn Berry, Dallas County Community College District, 701 Elm, Rm. 200, Dallas, TX 75202.

Two more seminars on Tools for Community Economic Transformation have been announced by the Intermediate Technology Development Group and the E.F. Schumacher Society. Each week long seminar will provide an opportunity to examine in depth the programs, organizations, and legal structures for integrated community economic development. The first seminar will be held in San Francisco, January 9-15, and the second seminar will probably be in the Chicago area, June 12-18. For more information contact: The Schumacher Society, Box 76, RD. 3, Great Barrington, MA 01230 413/528-1737 or the Intermediate Technology Development Group, 777 United Nations Plaza, New York, NY 10017 212/972-9677.

The Aquaculture Convention and Trade Show will be held January 9-13 at the Washington Hilton Hotel in Washington, D.C. Sponsoring organizations include the World Mariculture Society, the Catfish Farmers of America, and the Shellfish Institute of North America. For more information contact: Louann Wannemacher, Classock & Associates, PO Box 55060, Little Rock, AR 72205. 501/611-7677.

Farmers, researchers, farm suppliers, and many others will assemble for the second annual Conference on Sustainable Agriculture to be held January 21-23 in La Honda, California (near San Francisco). Topics will include: weed management, post-harvest handling, foliar feeding, marketing, and economics of ecological farming. The registration fee is $55 ($65 after January 8). For further information contact: Steering Committee for Sustainable Agriculture, PO Box 464, Davis, CA 95617/752-7645 or 916/756-8518.

Photovoltaics: From Research to Reality is a conference being sponsored by the New England Solar Energy Association, scheduled for March 24-26 and is to be held at the Massachusetts Institute of Technology. For more information contact: Alex Wilson, NESEA, P.O. Box 778, Brattleboro, VT 05301 802/254-2386.

Composting Municipal Wastes is the subject of a conference for the Upper Midwest, sponsored by the University of Minnesota and taking place on January 11. For details contact: Leslie Denny, Department of Conferences, 315 Pillsbury Drive S.E., University of Minnesota, Minneapolis, MN 5545 612/373-3325.

The fourth annual energy tour of Israel will take place February 17-March 1. The event is co-sponsored by Solar Lobby-Sun Times, Wind Power Digest, Renewable Energy News, Jordan College, and the Michigan Department of Commerce. For more information contact: D. Bailey, Jordan College, Cedar Springs, MI 49314 616/696-1180.

ASHRAE Semi-annual Meeting and International Air-conditioning Heating and Refrigeration Exposition will be held January 23-27 in Atlantic City, New Jersey. Contact Ralph Burkowski, ASHRAE, 1791 Tullie Circle N.E., Atlanta, GA 30329 404/636-8400.

The American Society of Mechanical Engineers Energy Sources Technology Conference and Exhibition will be held in Houston, January 30-February 3. Contact Frank Demarest at the Society, P.O. Box 59489, Dallas, TX 75229 214/247-1747.

The International Symposium-Workshops on Renewable Energy Sources will be held March 19-24 in Lahore, Pakistan, presented by the Clean Energy Research Institute, University of Miami, and hosted by the Pakistan Council of Scientific and Industrial Research. For more information contact: Clean Energy Research Institute, University of Miami, P.O. Box 249294, Coral Gables, Florida 33124.

Strategies for ending hunger and poverty at home and in the Third World is the subject of the Politics of Hunger: Seminar/Praxis conducted by World Hunger Education Service in Washington, D.C. from January 9-21. Fee for the two week seminar is $250 with limited fellowships available. For more information contact: Sheila De Turk, World Hunger Education Service, 2035 P Street, N.W., Washington, D.C. 20036 202/223-2995.

PACIFIC NORTHWEST EVENTS

The future of Northwest Agriculture will be explored February 4-6 at Camp Adams, 4.5 miles east of Molalla, Oregon. Working together on this timely conference are a number of church organizations, the Washington State University Extension Service, the RAIN Community Resource Center, the Oregon-Washington Farmers Union, TILTH and the Washington Small Farm network. For details contact Laura Stuchinsky, c/o RAIN 2270 N.W. Irving, Portland, OR 97210.

The Breitenbush Community will be celebrating the winter solstice and the completion of the Medicine Wheel Hot Tubs through Native American sacred rituals. $20/day, December 17-22 (Breitenbush Community, PO Box 578, Detroit, OR 97342. 503/854-3501.

Computer Concepts for the Office Staff is the theme of workshops — in Seattle, Washington (January 13-14) and in Anchorage, Alaska (January 20-21), sponsored by Pacific Lutheran University. Contact: School of Business Administration, Executive Department, Pacific Lutheran University, Tacoma, WA 98447.
Welcome the new year with RAIN — Join our community of readers!

URBAN ECOTOPIA POSTER, 22" x 33", 1976; SUBURBAN ECOTOPIA POSTER, 22" x 30", 1976; STEPPING STONES POSTER, 21" x 24", 1978, $3.60 each. COMMUNITY ALERT POSTER, 32" x 44" (full color) $6.00, all by Diane Schatz.
The first exciting glimpses of an Ecotopian vision. Three posters that portray an urban, a suburban, and a bio-regional landscape. The scenes give literal expression to the idea of community self-reliance — where cottage industries, cooperative institutions and appropriate technologies combine to make cities, suburbs and the land habitable and happy places to be. All three of these line-drawn posters are rich in detail and perfect for coloring.

KNOWING HOME: Studies for a Possible Portland
Editors of RAIN
88 pp., 1981, $6 ppd.
An inspiring model for other cities and towns as well as an excellent way to introduce friends and family to community self-help, this beautifully illustrated book includes articles on the history of self-reliance in Portland, a bioregional map, our sense of place, strategies for a sustainable city, life support systems, profiles of community self-help projects, plus visions for an ecologically and socially balanced future.

RAINPAPER NO. 1 CONSUMER GUIDE TO WOODSTOVES
Bill Day
16 pp., Revised Jan. 1981, $3.60
Bill Day’s expanded Consumer Guide is a compilation of his articles in RAIN, covering the selection, installation and repair of woodstoves, wood cookstoves and wood furnaces. Included are helpful notes on fireplace retrofits and chimney maintenance. Essential reading for those of you interested in this revitalized energy alternative.

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CHINESE AQUACULTURE:
Fine Tuning A. T.

Organic fish farming, more properly known as integrated ecological aquaculture, is a relatively new science in the West.

Half a world away, in the village of Wuxi in the Jiangsu Province of eastern China, the Asian-Pacific Research and Training Center for Integrated Fish Farming conducts what is reportedly the best aquaculture work in the world. They ought to — the Chinese have been fish farming for 2,000 years.

We are finally getting an opportunity to exchange information and reap the benefits of this rich and ancient history, this grand tradition that over generations has evolved into a science and an art. Two very special people, Christina Rawley and Ron Zweig of the New Alchemy Institute (NAI), are in Wuxi now, finishing up a year of aquaculture studies and of getting to know China. At New Alchemy, Ron has masterminded some of the most sophisticated aquaculture research in North America, including innovative work incorporating fish production into solar greenhouse design. Christina, whose colorful background includes one of the original Clamshell Alliance “occupations” of the Seabrook, NH nuclear plant site, is publications editor at NAI.

What follows is excerpted from a letter circulated among friends this summer. More detailed information will undoubtedly be made available in future New Alchemy publications (write to NAI, 237 Hatchville Road, East Falmouth, MA 02536).

— Mark Roseland

by Christina Rawley and Ron Zweig

The integrated fish farming in this area is unsurpassed anywhere in the world. Fish production on an annual basis approaches 14,000 kgs. per hectare of pond area. The methods applied are quite simple including measurements like turbidity checks and its maintenance for best productivity. The ponds’ transparency is maintained at the length of your forearm by checking your hand’s visibility with your arm submerged to the elbow. The polyculture, stocking ratios are another important key where appropriate numbers of different species are stocked to be able to utilize the proportion of pond generated feeds that develop as a result of manuring and adding grasses. The whole process of fish culture from artificial propagation through fry and fingerling rearing to food fish production has been finely tuned. Some farms do better than others, and this can generally be attributed to experience, though in some instances a grand tradition of bullheadedness contributes to a lack of efficiency. Even in these instances production is damn good on a world-wide basis.

With the present drives toward modernization, some consideration is being given to trout culture. Carp culture is old fashioned and must be re-examined. (By the way, the Chinese carp s are excellent tasting fish — all of them.) Along with consideration of trout culture, pelleted feed is being used more and more widely. The production as a result of using pellets comes close to that of straight pig manure, snails and grasses — that is in terms of feed conversion into fish growth. The pellets obviously are far more costly since they contain nutritious grains, vitamins, and minerals in addition to fish meal. Must modernization always lead to disintegration? Hopefully, with careful assessment and the huge amount of time it takes to implement any extensive technological change in this country, the value of traditional methods will be realized and maintained...