Tom Bender
Amory & Hunter Lovins
The State of the Movement
RAIN magazine
Special Combined Anniversary Issue:
Volume IX, Number 6/
Volume X, Number 1

Guest Editor:
John Ferrell

Staff:
Rob Baird
Ann Borquist
Than James
Steve Johnson
Alan Locklear
Kris Nelson
Jeff Strang

Contributors:
Steven Ames
Bruce Borquist
Carlotta Collette
Dave Deppen
Carolyn Hitchcock
George Resch
Mark Roseland
Marie Valleroy

Graphic Design:
Linnea Gilson

Comptroller:
Lee Lancaster

Special Thanks:
To all the former Rainmakers
who contributed memories,
visions, and insights for this
anniversary issue. And our
appreciation to typesetter Patti
Morris and photographer Ancil
Nance, who have helped to
make RAIN special since Vol. I,
No. 1.

RAIN Magazine publishes information
which can help people lead more simple and
satisfying lives, make their communities
and regions more economically self-reliant,
and build a society that is durable, just, and
ecologically sound.

RAIN is published 6 times a year by the Rain
Umbrella, Inc., a nonprofit corporation lo­
cated at 2270 NW Irving, Portland, Oregon
97210, telephone 503/227-5110. Subscrip­
tions are $25/yr. for institutions, $15/yr. for
individuals ($9.50 for persons with incomes
under $6000 a year).

Copyright © 1983 Rain Umbrella, Inc. No
part may be reprinted without written per­
mission. ISSN 0739-621x

IN THIS ISSUE...

Articles
The Magazine from Ecotopia: A Look Back at the First RAIN Decade—
by John Ferrell ................................................................. 5
The State of the Umbrella—by Rob Baird .................................. 10
The State of the Movement:
  Energy—by Amory and Hunter Lovins .................................. 12
  Economic Development—by Harriet Barlow .......................... 15
  Shelter—by Tom Bender .................................................. 16
  Agriculture—by Mark Musick .......................................... 18
  Information/Communications—by Sandy Emerson ............... 19
  Recycling—by Judy Rountmpf & Jerry Powell ....................... 21
  Bioregional Planning—by Michael Helm ............................. 22
Between the Cutting Edge and the Flaky Fringe:
An Unorthodox Index to RAIN—compiled by Steve Johnson ........ 24
Remembrance of Themes Past ............................................... 26
Sharing Smaller Pies—by Tom Bender .................................... 28
An Open Letter to the Ecological Movement—by Murray Bookchin ... 32
Access Excess: A RAIN Parody ............................................ 36
Rainmakers: Where Are They Now?—by Ann Borquist ............... 38
Rainmakers Look at the Future—compiled by Jeff Strang .......... 40
Rainmakers’ Favorite Books—by John Ferrell .......................... 42
A.T. in Oregon: Conservation Innovation ................................ 44
Taking Pictures and Taking Souls—by Tom Bender .................... 64

Features
Calendar ................................................................. 59
Letters ................................................................. 4
Pacific Northwest Bioregion Report ...................................... 48
Raindrops ............................................................ 3
Rush ................................................................. 59
Touch & Go ........................................................ 11
SOME magazines entering their 10th year of publication might boast of a phenomenal circulation milestone—but not RAIN. Today, there are about as many people reading it as when it began. Not the same readers, of course, and the staff has changed as often as the readership.

While in its life, RAIN cannot claim to have altered the course of history, it has, nevertheless, had influence greater than its circulation figures would suggest. It is difficult to document the ways RAIN has influenced people and events. It has always been a subdued force, not proclaiming itself from the mountaintops.

When RAIN started, there were only a handful of other communication vehicles attempting to give voice to the many social change movements then emerging. RAIN was able to review most any document published about solar energy, while today we receive an index to solar energy articles each month that is the size of RAINBOOK!

RAIN has never stood still for long. As staff and society have changed, so has RAIN. But somehow, we believe, the magazine has kept a certain special quality through the years—something we refer to as “RAIN magic.” Whoever has been at RAIN at a particular time has managed to bring forth some new ideas and perspectives, keeping the magazine at the forefront of change. And despite RAIN’s generalist quality—something no marketing consultant would encourage—it has survived.

At RAIN, we are always looking to the future, always “in transition.” But just this once, for this special anniversary issue, we are looking backward and forward at the same time. In these pages, you’ll find articles that review our own history and the history of the social change movements we have long followed. You’ll also find visions of what is in store for the social change community and for the larger world during the coming decades.

We feel that by putting together this special issue we’ve gained some important perspectives on RAIN’s continuing role as a vehicle for change. We think those perspectives will help us to serve you even better in the future—and we look forward to bringing you many more issues of RAIN!—the Rainmakers

Read RAIN, but Plant a Tree

In nine years, RAIN has used up about 1,694,000 pounds of paper, or 13,552 trees—31 acres worth. Our readers have their work cut out for them, so to speak: to make up for our use of trees, they need to plant about 70 trees each! However, as Nancy Cosper points out, a number of our readers are Hoeadad tree planters, and they plant thousands of trees. Taking that into account, RAIN could even take some credit for a silviculture surplus.—SJ
Dear RAIN:

Tom Bender's comment on "Is Socialism the Answer?" (June/July '83) focuses attention on the unresponsiveness of bigness under any name. Amory and Hunter Lovins' article in the same issue focuses on the vulnerability of bigness.

Big size is not the only thing those comments apply to: there's also big speed and big acceleration. Sudden change can't be responsive change and is always vulnerable to upset. As the saying goes, haste makes waste.

Because of how money is invested for growth, economies are generally structured to run and change faster and faster (read: less responsive and more vulnerable) until their "gears" clash or they simply burn themselves out (to then pick up and do it again). While there are many ways to arrange things that would avoid that, the only ones presently in practice are totalitarian socialism and barter. All three—growthism, totalitarianism, and barter—are quite unacceptable for a global economy.

Sincerely,
Philip F. Henshaw
Brooklyn, NY

Dear Steve:

Just a note to wish all the Rainmakers a happy anniversary. As one of the founding godpersons, I am pleased that you continue to prosper. I cannot say that I would have wagered, a decade ago, that you would still be in existence.

Your presence is felt and continues to be necessary. I trust that I will be able to write the same kind of letter in another 10 years.

Cordially,
John D. Taylor
President
Northwest Area Foundation
Saint Paul, MN

Dear John:

Congratulations on your 10th year of publishing! RAIN has always been a favorite magazine here at VITA, and we are pleased to see you reach this milestone.

Yours,
David Jarmul
Managing Editor
VITA News
Volunteers in Technical Assistance
Arlington, VA

Dear RAIN:

Gene Spagnoli, assistant to the commissioner of the New York State Department of Environmental Conservation, is a reader of your publication. He sent us the June/July '83 issue. We were left out of "Choosing the Future: Social Investing".

Our mutual fund should have been, we believe, above all the rest. We are the first and only fund for solar and alternative energy and are up 30 percent in less than a year. Yes, we are registered with the U.S. Securities and Exchange Commission.

We are doing well for our investors. However, since we have no regular sales organization or connection with established security firms, most of the world does not know we are here. Please let them know.

Thanks,
Maurice L. Schoenwald
New Alternatives Fund, Inc.
Suite 300
295 Northern Boulevard
Great Neck, NY 11021

Index to RAIN Volume IX

Volume IX

Vol. IX, No. 1, October/November 1982 (40 pp.)
True Security, by Tom Bender, 6
20,000 Kilometers Under the Sea: Taking Offense at Trident, by Jim Springer, 8
Trying Out the Future: A Look at A.T. Research Centers, by Laura Goldman and Nigel Dudley, 14
Ordinary Excellence on the Farm, a talk by Wendell Berry, 20
Pacific Northwest Bioregion Report, 31

Ordinary Excellence on the Farm, a talk by Wendell Berry, 20
Appropriate Technology in Oregon: A Solar Sampler, 22
Peacemaking: Alternative Methods of Dispute Resolution, by Steve Johnson, 28
Pacific Northwest Bioregion Report, 31

Vol. IX, No. 3, February/March 1983 (40 pp.)
The Bioregional Movement, an interview with Planet Drum, 4

Vol. IX, No. 4, April/May 1983 (40 pp.)
Choosing the Future: Social Investing, an interview with Grace Parker, 18

Volume IX, No. 5, June/July 1983 (40 pp.)
Real Security, by Amory and Hunter Lovins, 4
The Politics of Weeds, by Diane Cameron, 8
Is Socialism the Answer? by Tom Bender, 12
The Game of Landfill Salvage, by Dan Knapp, 14
Computers, Cooperation, and Making Lots of Money While Avoiding the Dumb Death of the Species as We Know Us, by Anne Herbert, 16
Choosing the Future: Social Investing, an interview with Grace Parker, 18

Letters

Dear RAIN:

Gene Spagnoli, assistant to the commissioner of the New York State Department of Environmental Conservation, is a reader of your publication. He sent us the June/July '83 issue. We were left out of "Choosing the Future: Social Investing".

Our mutual fund should have been, we believe, above all the rest. We are the first and only fund for solar and alternative energy and are up 30 percent in less than a year. Yes, we are registered with the U.S. Securities and Exchange Commission.

We are doing well for our investors. However, since we have no regular sales organization or connection with established security firms, most of the world does not know we are here. Please let them know.

Thanks,
Maurice L. Schoenwald
New Alternatives Fund, Inc.
Suite 300
295 Northern Boulevard
Great Neck, NY 11021

Index to RAIN Volume IX
The name of the newsletter, Steve noted laconically, would be RAIN. No further explanation of that choice was required in a communication between two lifelong Oregonians.

THE MAGAZINE FROM ECOTOPIA:
A Look Back at the First RAIN Decade

by John Ferrell

RAIN is a mythical publication in that it distributes only a few thousand copies per issue, yet it is quoted and used as a basis of information... by many professional architects, builders, ecologists, government energy planners, and so forth. Its reputation exceeds its circulation much in the same way that I. F. Stone's Weekly did in the early years of its existence...

The people who edit and publish the magazine also have reputations in the Northwest and the nation: they are young economists, architects, cartographers, consultants to state government in Oregon and California, magazine editors, teachers. Their large, wood-frame house on N.W. Irving Street in Portland is like some kind of massive New Age braintrust data bank. One approaches it with respect.

The "mythological publication" that journalist Ray Mungo described in the November 1976 issue of New Age magazine was just launching into its third year, fueled (in Mungo's words) "by avocado salads and organic peanut butter on whole wheat bread." That someone like Mungo was already according RAIN mythological status was gratifying to the founding Rainmakers, but also a bit bewildering. They had begun with much more modest goals.

In the summer of 1974, Steve Johnson, a Portland-based freelance writer, sent a note to Bob Benson, a well-known local historian and mapmaker. The two friends had recently co-edited the Chinook Centrex, a kind of Pacific Northwest people's yellow pages. Now Steve was seeking Bob's ideas for a new project he was undertaking at Portland State University's Environmental Education Center.

"I'm working here, funded to find ways to increase communication among environmentalists," Steve
much larger project called Eco-Net that was funded by the U.S. Department of Health, Education and Welfare and by the Hill Family Foundation (later called Northwest Area Foundation). Administered by Environmental Education Center director Dr. Don Stotler, Eco-Net was meant to serve as a communications network for people in the Pacific Northwest involved in a variety of energy and ecological concerns. Besides RAIN, Eco-Net supported a community access video project, an energy information facility, and a community resource center. Although it existed officially for only a few years, Eco-Net proved to be a remarkable seedbed for projects and ideas that continue to shape Pacific Northwest attitudes about energy, ecology, and communication.

In September 1974, Steve Johnson and fellow Eco-Net employees Anita Helle and Mary Wells completed the first issue of RAIN and sent it free to a 3000-name mailing list. The 24-page publication was an eclectic catalogue of books, magazines, and organizations falling under such diverse headings as Air, Architecture, Art, Computers, Consciousness, Energy, Games, Land Use, Networks, Recycling, Water, and Whole Systems. In addition to the access sections, there was a news report on Eco-Net activities, a calendar of upcoming events, and a brief article by Bob Benson on “where to get maps.” Readers found the following introduction, written by Steve Johnson, on page two:

RAIN is a monthly bulletin board. As stuff comes our way by phone, mail, feet, hands, and mouth, we make entries, abstracts, paragraphs. We emphasize environmental education related and communications kinds of information; and we are interested in the evolutionary possibilities of interdisciplinary connections.

Our geographic emphasis is the Pacific Northwest, though our prejudice will be Oregon, and more specifically Portland. You can correct our bias by your feedback. . . .

Reader response was immediate and dramatic. Letters and requests for the new publication began pouring into RAIN’s office at the Environmental Education Center from around the Northwest and from other parts of the country. Many of the new RAIN fans were active participants in various facets of the emerging appropriate technology movement: solar architecture, wind energy, sustainable agriculture, alternative transportation, and community communication networks. These people were hungry for news of each other’s projects and for leads to the often-obscurc books and magazines being published in their areas of interest. RAIN filled their information gap and filled it well. As Rhoda Epstein, an early reader (and later a RAIN staffer), explained, “The Rainmakers were putting out my primary source of information about the things I was working with. I was living in a city [Washington, D.C.] where information is the biggest local industry and the newest information I got was from RAIN magazine.”

Soon after the first issue was mailed out, another Eco-Net employee joined RAIN’s small staff. Lee Johnson had been building windmills, solar systems, and alternative housing for several years, and he shared Steve’s passion for information. The two Johnsons (no relation) decided to combine their massive collections of file cards, news clippings, organizational brochures, and networking miscellanea in the RAIN office. As they went about their pleasant work, they discovered another reason why, for information junkies, working with a magazine can seem like a perpetual Christmas morning: the RAIN mailbox began to fill with hefty packages sent by various publishers. Free review books! It was the beginning of the present-day 4,500-volume Rain Community Resource Center library collection.

As RAIN’s press run continued to grow rapidly through late 1974 and early 1975, so did the optimism of its staff; it seemed more and more likely that the magazine could spin off from Eco-Net and survive on a paid subscription base. John Taylor of the Northwest Area Foundation agreed to ease the transition to self-reliance with a one-year $14,090 grant.

In June 1975 the last free issue of RAIN went out to approximately 8000 individuals and organizations. Steve and Lee Johnson, together with RAIN’s business manager Anne McLaughlin, began to search for new office space. As has so frequently happened in the life of RAIN, serendipity promptly asserted itself. Two RAIN friends, Tom Bender and Lane deMoll, had recently left jobs with the Oregon Office of Energy Research and Planning, which, under Governor Tom McCall, was performing some of the most innovative net energy analyses in the country. Bender and deMoll were seeking a home for Full Circle, their newly incorporated community resource center. The RAIN and Full Circle staffs sensed a strong potential for synergy and decided to live and work together in a large, turreted Victorian house in northwest Portland. A few hundred dollars worth of fresh paint later, the Rainhouse was born.

RAIN and Full Circle saw the new location as a place to put some of their ideas about local self-reliance into practice. “We were planning to do a lot of things like neighborhood gardens. . . .” Lane deMoll later told a reporter, “but getting the magazine on its feet independent of the grant money took all of our energy.” Nevertheless, a “Random RAIN 10-Week Log” published in the July 1976 issue of the magazine indicates how little time elapsed before Rainhouse inhabitants were plunging into an amazing array of local and national conferences, energy workshops, consulting contracts, and educational forums. The “10-Week Log” also notes in passing that the RAIN/Full Circle division had already vanished with the formation of the Rain Umbrella, Inc., a nonprofit educational organization.

The 1975-76 transition to a paid subscription base was not a smooth one. Then, as now, there was always too little time and too little money for the staff to keep up with the usual kinds of magazine promotion. And then, as now, RAIN was the kind of magazine that passed through many hands in offices, libraries, and communal houses. It became abundantly clear that the magazine’s readership vastly outstripped its paid circulation figures.
RAIN's regional and national reputation grew apace with the burgeoning a.t. movement.

Still, subscription numbers continued to inch upward, and RAIN staffers managed to find enough outside work to maintain both the magazine and their own "living lightly" lifestyles.

As Steve Johnson had noted in the first issue of RAIN, the magazine's geographic emphasis was expected to shift in response to reader feedback. During its first two years, RAIN continued to pay particular attention to Pacific Northwest projects, publications, and events, but its editorial scope, like its readership, grew increasingly national. There was also an evolution in format as catalogue-type entries grew more polished and feature articles became more prominent. Many of the early articles were penned by RAIN staffers, but such appropriate technology luminaries as E. F. Schumacher and Amory Lovins also put in appearances.

RAIN's regional and national influence continued to grow apace with the burgeoning a.t. movement. The magazine became a recognized bicentennial project during 1976, and that same year, Rainhouse visitors included such well-known figures as California Governor Jerry Brown and California State Architect Sim Van der Ryn. RAIN staffers participated in the planning of a new National Center for Appropriate Technology (now located in Butte, Montana) and consulted with the recently established California Office of Appropriate Technology. In 1977 the publication of RAINBOOK (a compilation of the best from the early RAINs, together with a good deal of new material) was greeted with praise by reviewers for many periodicals, including The Atlantic Monthly and The New York Times.

But such widespread recognition raised new questions for the RAIN staff and for the rest of the appropriate technology movement. "We're finding that the field of a.t. and alternative energy is really taking off," noted Lane deMoll in a 1977 Raindrops column. "When it's legitimized at the presidential level, you know things have changed—we're no longer the crackpots we were five years ago. But so much is happening that we're finding it hard to keep up with... What's the next step beyond a.t.? How do we keep a fine grassroots movement from being co-opted and ruined by government and big business? It's odd after all these years of pushing to find so many barriers falling rapidly away."

If publication of RAINBOOK and emerging questions about the state of the a.t. movement made 1977 seem something of a watershed year for RAIN, the sense of transition was also evident in other, more personal events. RAIN founder Steve Johnson departed on a "sabbatical" that would ultimately stretch into three years. Tom Bender and Lane deMoll began to divide their time between Rainhouse duties and their home-building project on the Oregon Coast. Tom, Lane, and Lee Johnson were all feeling the need (as Lane expressed it in a Raindrops column) "to go back to some real-life hands-on stuff for awhile."

Sadly, Tom and Lane were soon faced with a "hands-on" task they never dreamed of. On February 8, 1978, their new home burned down—the morning after they completed it. Most of the monetary loss was covered by insurance and the emotional loss was eased by the love and support of many friends, but there was still the prospect of more months of shuttling back and forth between Portland and the Coast to re-complete a once-completed project.

In the meantime, RAIN was being infused with the talents and energy of several new staffers. These second-generation Rainmakers (Linda Sawaya, Steven Ames, and Phil Conti among others) were largely responsible for keeping the quality of the magazine high during the period in 1978 and early 1979 when the remaining oldtimers were gradually pulling away from
primary involvement. They also played heroic roles in the massive spring '79 promotional campaign that saved RAIN from looming financial disaster and provided a welcome nest egg for future needs. Other heroes in that drama were the many faithful RAIN readers who supplied promotional advice and free mailing lists.

But by the following summer it was clear that still another era in the life of RAIN was drawing to a close. Lee Johnson had left some months earlier to accept a position with the Western Solar Utilization Network. Most of the second-generation staffers had either recently departed or were on the verge of moving on to new pursuits. And Tom and Lane, by now firmly settled into their rebuilt home at the coast, announced their official departure from the staff in the August/September 1979 issue of RAIN:

...We have been with RAIN for four years, helping share new patterns that are emerging and becoming real around us. It has been an exciting time, and one which has been successful far beyond what most people could then conceive.

Many things, only dreams four years ago, have become commonplace and accepted realities—not complete, but fully alive and healthfully taking form now on their own strength. 

Projects and information and ideas once part of RAIN now appear in Better Homes and Gardens, Sunset, and The New York Times. Special journals now track the burgeoning areas of passive solar design, alternative sewage, health care, urban agriculture, simpler lifestyles, and community economics. Much remains to be done, and much that we and RAIN will help with in our own ways. But the time has come when [we] must become the last of the "old timers" to leave RAIN—to make room for new people and new visions and to make new use of what the last four years have taught us.

By the end of 1979, the staff transition was nearly completed. Carlotta Collette had arrived in October from Minnesota, where she had long been active weatherizing attics, building solar greenhouses, and working with neighborhood groups on food and energy policy issues. She was soon joined by Mark Roseland, who had, until recently, taught social ecology at Wesleyan University in Connecticut and volunteered with a number of a.t. and community groups in New England. Carlotta and Mark were both excited about being at RAIN, but perplexed about the myriad boxes of books and files that threatened to engulf the Rainhouse. "Only an archivist could straighten out this mess," murmured Mark one day. Almost immediately, RAIN serendipity came to the fore; John Ferrell, local solar activist—and former staff member with the National Archives—dropped by to see if there might be anything he could do. Carlotta, Mark, and John were to form the core staff of RAIN magazine for the next two and a half years.

Despite a wide range of experience and wonderfully complementary skills, the new Rainmakers were faced with one inescapable dilemma: none of them had ever actually published a magazine before! "Learn by doing" and "community self-reliance" were much in evidence around the Rainhouse for the next few issues, but things gradually settled into a more subdued level of day-to-day frenzy. Fortunately for the newcomers, two members of the old staff—circulation manager Pauline Deppen and graphic artist Jill Stapleton—stayed on part-time for a few months, providing invaluable continuity.

And the new Rainmakers took care to impart a sense of continuity to the pages of the magazine. Articles and reviews from former staffers appeared frequently, and RAIN continued to explore emerging trends in its traditional range of subjects: renewable energy, sustainable agriculture, alternative shelter, recycling, community economics, bioregionalism, and more. Certain themes did move into the foreground in response to changing times: women and ecology, the threat of government/corporate exploitation of Native American lands, and urban self-reliance strategies in the face of Reagan-era cutbacks.

The a.t./social change movement had continued to grow rapidly since 1977, when Lane deMoll had commented on RAIN's difficulties in keeping up with so many new developments. By the early eighties, RAIN staffers sought to review only the best of the hundreds of movement-oriented books being published each year, and they saw RAIN's principle role as a "maker of connections" between the themes and ideas now being addressed in a host of more-specialized movement magazines—exploring how a particular energy policy might fit into a bioregional perspective, for example, or how a particular energy or ecological problem could be approached with community self-reliance strategies.

The early eighties also saw an evolution in RAIN's relationship to self-reliance efforts in its own community. While the magazine continued its national focus, the Rainmakers were increasingly drawn back to the early RAIN goal of putting principle into practice locally. There was staff participation in local solar energy associ-
Portland, Johnson, Steve Rudman, and Nancy Cosper had primed into plans for a full-scale book that traced a wide range of fertilization as everyone set about meeting the ambitious goals of a one-and-a-half-year Community Self-Reliance Project that previous RAIN staffers had helped to start in 1978. Most important, there was the transformation of the Rainhouse into a community resource center.

The resource center idea began to take shape as the RAIN library took shape in the early months of 1980. By that time, most staffers no longer lived in the Rainhouse, and reorganized living/work arrangements meant extra space for information resources. As John Ferrell and a succession of interns proceeded to organize RAIN’s thousands of books, periodicals, and files, the magazine’s role as a local information provider (which actually stretched back to Eco-Net days) grew increasingly prominent. During office hours, the Rainmakers alternated between performing editorial functions and assisting a stream of visitors in search of good information on alcohol fuels, solar greenhouses, raised-bed gardens, or decentralist politics.

Re-enter Steve Johnson. Since leaving RAIN in 1977, Steve had undertaken a number of local information projects, including compilation of The Portland Book, a comprehensive community resource directory. Now, together with Steve Rudman (formerly of the Grantsmanship Center in Washington, D.C.) and Nancy Cosper (formerly of the Cascadian Regional Library in Eugene, Ore.), Steve was co-administering a new organization called the Portland Community Resource Center (PCRC).

RAIN and PCRC clearly had much in common: each had extensive information resources, considerable staff skills, and a strong desire to assist in the building of community self-reliance in Portland and the Northwest. In late 1980, in an odd twist of RAIN serendipity, the two organizations agreed to merge—much as RAIN and the Full Circle Community Resource Center had agreed to merge some years earlier. Certainly Steve Johnson reflected on the Full Circle analogy as he found his own life circling back into the life of RAIN.

The expanded Rain Umbrella, Inc., had a full-time staff of seven and a formidable combined collection of information resources—all crowded into the Rainhouse. Carlotta Collette, Mark Roseland, and John Ferrell—together with Laura Stuchinsky, who had first joined RAIN’s staff as an intern in early 1980—continued to have primary responsibility for the magazine. Steve Johnson, Steve Rudman, and Nancy Cosper had primary responsibility for the new Rain Community Resource Center (RCRC). But there was immediate staff cross-fertilization as everyone set about meeting the ambitious goals of a one-and-a-half-year Community Self-Reliance Project, funded in part by RAIN’s original benefactor, the Northwest Area Foundation. (For details on the current activities of the Resource Center, see Rob Baird’s “State of the Umbrella” article elsewhere in this issue.)

Staff cross-fertilization reached its creative peak with the publication of Knowing Home: Studies for a Possible Portland in the fall of 1981. Plans for a 16-page pamphlet on “community self-reliance in Portland” had grown into plans for a full-scale book that traced a wide range of questions relating to community values, economics, ecology, and sense of place. Knowing Home received much favorable attention both locally and nationally. It also did much to establish RAIN in its own city as a voice worthy of attention.

But the magazine was now on the verge of another of its “transition” years. During the course of 1982, Carlotta, Mark, and Laura each moved on to new adventures. Finally, late in the year, John left, and the magazine’s third-generation staff was completely gone. RAIN’s first editor, Steve Johnson, resumed his old role, and was assisted by the entire Rain Community Resource Center staff.

The fourth-generation Rainmakers continued to refine some recent changes in RAIN’s features and format. With the October/November 1982 issue, the magazine had moved to a bimonthly (as opposed to a 10-issue-per-year) schedule. It had also adopted an expanded 40-page format, added some new features (the “Pacific Northwest Bioregion Report” and an advertising section), and revived an old feature (the “Touch & Go” humor column that had last appeared in RAIN in 1976). To these changes, the new magazine staff added regular review sections for organizations and periodicals, a “Calendar” section, and a redesigned “Rush” page.

The early eighties saw an evolution in RAIN’s relationship to self-reliance efforts in its own community.

By 1983, as RAIN approached its 10th year, it could look back upon hundreds of articles and thousands of reviews on almost every conceivable subject. It could also look back upon three separate subtitles: Monthly Newsletter of Eco-Net,” “A Monthly Bulletin Board,” and “Journal of Appropriate Technology.” But in an important sense, RAIN was still what it had always been: a magazine deeply concerned with information—the kind of information that could help its readers to “lead more simple and satisfying lives, make their communities and regions more economically self-reliant, and build a society that is durable, just, and ecologically sound.”

On a more personal level, RAIN had evolved into a rich bond of common experience for dozens of former editors, office managers, graphic artists, interns, contributors, and stringers. Each of these people, whether mentioned by name in this brief history or not, left something of value at RAIN: an enduring idea, a continuing feature title, a graphic style, an improved office procedure—or a mysterious box in the Rainhouse basement.

To all of the former Rainmakers, we dedicate this history and extend our thanks. □ □
The State of the Umbrella

by Rob Baird

To say that the Rain Umbrella, Inc., is in "a state of transition" has become something of a cliche. It often seems to be a permanent transition! Part of our continuing change is staff turnover, and there has been an unusual amount of that during the past year-and-a-half. Even more significant is the change that has been taking place in the goals and activities of the organization.

The Umbrella is made up of two separate, but closely interconnected parts. RAIN magazine constitutes one half. The other half is the Rain Community Resource Center, which was formed in early 1981 by the merger of the magazine with the Portland Community Resource Center, a citizen involvement organization. (For details on that merger, see John Ferrell's "Magazine from Ecotopia" article elsewhere in this issue.)

The goal of the new Rain Community Resource Center was to foster and support community self-reliance activities in Portland and the Pacific Northwest. Put another way, the Resource Center helped the Rainmakers to implement their original goal of doing locally and regionally what they were writing about in the magazine.

The Resource Center started off with an ambitious one-and-a-half-year Community Self-Reliance (C.S.R.) Project funded by the Northwest Area Foundation, Mervyns/Dayton Hudson Foundation, Collins Foundation, Yarg Foundation, Templeton Foundation, Oregon Community Foundation, and the Rose E. Tucker Charitable Trust. As part of the C.S.R. Project, the Resource Center (together with the RAIN magazine staff) published *Knowing Home: Studies for a Possible Portland.* A wide range of information services and a number of community education programs were also implemented through the C.S.R. Project.

Today, the Resource Center continues to provide a similar range of community services. The Rain Library, which is open to the public three days a week, has over 4,500 books and receives 600 periodicals from around the world. Library topics include renewable energy, sustainable agriculture, bioregionalism, community self-reliance, community computer applications, and much more. Our responses to information requests from individuals and organizations range from simple referrals to detailed research reports.

Forums, workshops, and conferences on a variety of community self-reliance topics are another continuing concern of Resource Center staff, and Rain also seeks to foster self-reliance through participation in community projects and organizational coalitions in the Portland area.

Recent examples of Rain Community Resource Center activities include:

- coordination of a conference on "The Future of Agriculture in the Northwest";
- presentation of a forum (in cooperation with Portland State University) that featured "soft energy" advocate Amory Lovins;
- organization (in cooperation with the Eliot Energy House) of a farmers market in a low-income Portland neighborhood;
- computer system design assistance to community groups, including development of an arts resources database and a neighborhood needs and resources database;
- assistance in setting up community gardens and a small truck farm for local Southeast Asian refugees;
- co-administration (with Oregon Appropriate Technology in Eugene) of the U.S. Department of Energy's Appropriate Technology Small Grants Program for Oregon.

The initial Community Self-Reliance Project funding ran out in August 1982, and since then, the Resource Center operation has been funded by grants and contracts for specific projects. (RAIN magazine is self-supporting through subscriptions and advertising but
does require some staff assistance from the Resource Center.) The perennial problem for Rain (as well as for other nonprofit organizations) is that grants come and go and don’t cover basic overhead costs. The starting point for the Resource Center’s present transition is the recognition of the need for a self-sustaining funding base. Going along with that is a recognition that a community project can only survive if it is supported by the community it serves.

A big step that we have recently taken is to institute a more formal Rain Umbrella Board of Directors made up of local community leaders. The Board members provide both increased contacts in our own community and some of the long-range vision that is often difficult to muster among harried staffers.

One way we hope to generate self-sufficient funding is through paid information services. More and more, people are coming to recognize the value of the many kinds of information the Resource Center is capable of providing, and we are attempting to work out new ways to market what we do best.

In 1975, former RAIN magazine editor Lee Johnson wrote an essay entitled “A Future Story I Like.” The essay described what the Rain organization might look like in the spring of 1984: an energy/environment center, located next to a neighborhood office, that is attempting to empower local citizens by assisting in such projects as the conversion of older homes to solar heating and the establishment of community cable TV channels, recycling centers, community gardens, and food co-ops.

Today the Rain Community Resource Center embodies many of the values and goals of Lee’s vision. Hopefully, the end point of our current transition will be a community-based, financially sound Resource Center that can expand its present efforts to build a more just and durable society. With the support of RAIN magazine readers and our local community, we just might make it to that goal not too long after the spring of 1984.

TOUCH AND GO

“Touch & Go” has been a RAIN feature, off and on, since 1975. Below are some of the best of the early “Touch & Go” entries.

Going Cuckoo in the Salem Meat Locker (Dec. ‘75)

Jack Nicholson was living in Salem, Oregon, getting up before dawn every morning and plodding off to the hospital where “One Flew Over the Cuckoo’s Nest” was being filmed. Tim Cahil, in a Rolling Stone article, describes Salem: “Winter in Salem, Oregon, can add several hundred pounds of bad psychic baggage to the soul of a Southern Californian like Jack Nicholson. There is a constant chill fog, and the sun, at high noon, could possibly be that faint glimmer behind the brightest cloud bank. It is like living inside an Edgar Allan Poe poem, minus 20 degrees centigrade.... Have I yet suggested that the effect of a winter’s day in Salem can best be experienced by wrapping oneself in 30 pounds of wet blankets and standing inside a meat locker for 24 hours?”

Fourteen-Ton Birdbath (Feb. /Mar. ‘76)

Rubelia is an evolving castle compound in the San Gabriel Valley (California) that has a windmill irrigating a small vegetable garden and running an old washing machine. Another machine, a 14-ton, single-cycle gas engine, operates a birdbath. A similar four-ton engine turns a barbecue. You enter the compound through a 4,500-pound gate topped off with menacing metal letters that spell “Rubelia.” Inside, a road of railroad ties leads under a water tower that holds a 2,000-gallon storage tank. To the right is a garage containing a fleet of 18 old cars, trucks, and tractors that Rubel (Lord of Rubelia) says will be ready for a local bicentennial parade.

Motor Cola (Oct. ’75)

Captain Jack is building a spacecraft in the hills of southwest Portland, Oregon, and calling it his home. “I was born on Saturn,” says Jack, “but our family got kicked off the planet because my dad was fired from his job. We went off to Mars, but it was horrible there, so bushy and no social life. One night I was out with my chick and we ran out of gas. The gravitational pull brought me down to earth, and ever since I’ve been trying to figure out how to get back.” Instead of food, Captain Jack says, he drinks what he calls “motor cola,” and needs only one bottle of this a day to sustain himself.

Famous Last Words (Dec. ’75)

“Stand away, fellow, from my diagram”—Archimedes

“Moose, Indian”—Henry David Thoreau
The State of the Movement

RAIN has always been a generalist magazine, concerned (as was stated in Volume I, No. 1) with "the evolutionary possibilities of interdisciplinary connections." Still, it is easy to pick out certain broad concerns of the appropriate technology/social change movement that have also been RAIN's principal concerns since the very beginning: sustainable agriculture, bioregional planning, community economics, renewable energy, information/communications, recycling, and alternative shelter.

For this special anniversary issue, we asked people with well-recognized knowledge and experience in each of these areas of the a.t./social change movement to share their views of the movement's successes and failures over the past 10 years and their visions of what awaits the movement during the second RAIN decade.—JF

Drawings from Diane Schatz's Ecotopia posters

Energy
© by Amory and Hunter Lovins

At least two-thirds of Americans now realize that "energy conservation" means insulating your roof, not freezing in the dark.

People who suggested that energy be used efficiently and that a larger share of it (eventually most or all of it) come from appropriate renewable sources were considered kooky primitivists a decade ago and utopian dreamers five years ago. Now they're painfully respectable. They cite such sources as the Harvard Business School and the new-product reports of the Fortune 500; opposition to their thesis is confined to the uninformed. The transition from the barricades to the boardrooms is difficult for some to make.

The transition, though, is toughest of all for the energy supply industries. Planners are awash in unexpected gluts of oil, gas, coal, uranium, and electricity (at least in countries like our own—not in the nations where roughly two billion people still scrounge for wood and dung to cook their food). The energy supply industries, believing their own inflated projections, tooled up to sell far more energy than anyone wanted to buy. As a result, once-mighty utilities can't finance their way out of a paper bag; they may have to write off $100-200 billion in the next two decades. Some major oil companies may go belly-up, victims of imprudent investment strategies and the illusion that people wanted to buy barrels of sticky black goo (rather than mobility, comfort, etc.). However, those of us who saw all this coming, at least in outline, should restrain the impulse to say we told them so; while it's fun to be right, nobody likes to be around you when you are. We need instead to practice aikido politics—to talk to people where they are, not where we are, and to honor them and their beliefs even when we know, by divine inspiration, how misguided they are. Everyone's forecasts have been wrong, in varying degrees and for various reasons; nobody deserves a monopoly on humility.

The speed of the energy transition caught everyone
off guard, including us. Today's highest forecasts of U.S. energy needs in the year 2000 are well below the lowest unofficial forecasts made a decade ago, and they're still plummeting. But even more profound is the change in attitudes. As recently as 1974, ex cathedra pronouncements from such places as the Chase Manhattan Bank held that aside from curtailing holiday driving or television viewing, there was no scope for saving energy in the American economy: energy and GNP must spiral steeply upwards in a frenetic embrace. Today, however, it takes a fifth less energy than it did then to make the National Product a dollar grosser. The ratio continues to free-fall by several percentage points each year, with no end in sight. Indeed, it's now clear that the U.S., and the world, have barely scratched the surface of how much energy efficiency is available and worth buying. New ways to save energy emerge at a dizzying pace, each lasting perhaps six or eight months before being outdated by a better one. Energy efficiency and renewables are now among the fastest-growing sectors of the national and world economies. Their annual sales total tens of billions of dollars, and their markets are the target of international competition that is making the car business look tame.

In 1976-77, the concept of a soft energy path based on efficiency and appropriate renewables was greeted by howls of derision: the technologies didn't, couldn't, exist. Within a year, the technologies were acknowledged to exist but were claimed to be uneconomic. After two years' further debate about costs, most critics conceded the technologies were indeed economic (given careful shopping); the problem, they said, was that people wouldn't buy them. But that question has been settled empirically by a national experiment conducted since 1979, when the Iranian revolution brought to many sectors the first real price rises (and new motives of independence, security, and sticking it to the Ayatollah).

Since 1979, Americans have gotten more than a hundred times as much new energy from savings as from all expansions of energy put together, even though energy supply got six times as much investment and 10-20 times as much government subsidy.

Moreover, of those supply expansions, more new energy came from renewable sources than from any or all of the nonrenewables. Renewable sources, which were supposed to be unable to do anything much in this century, now provide nearly 8 percent of this country's total primary energy, and the fastest-growing part. We're getting about twice as much delivered energy from wood as from nuclear power (which had a 30-year, $40-billion head start); and since 1979, more new generating capacity has been ordered from small hydro and windpower than from coal or nuclear plants or both, without even counting their cancellations. Indeed, no central power plant of any kind has been ordered in the U.S. since 1981. The revolution has already happened unnoticed, through a quiet reallocation of priorities and capital. Just in 1980, Americans spent some $15 billion on efficiency and renewables—a fifth of all energy investment. But you ain't seen nothin' yet. The more people learn, the faster they'll buy.

Or will they? Now the debate is moving to a new, more theological level: the critics say that although efficiency and renewables have swept the market so far, they will falter as easy opportunities give way to tough choices. In this view, the world will turn back to technologies now dying of an incurable attack of market forces (fission, synfuels) because nothing else will work long enough, big enough, universally enough. Well, maybe. But few of the skeptics are putting their own money where their mouths are. In recent weeks we have been approached by some of the world's largest builders of power stations, acknowledging that nobody wants to buy their product and asking what to make instead.

There lies one of the challenges: How can institutions and people used to a few big products recycle themselves into making lots of much smaller ones? How can engineers enamored of gigantic, fancy, exotic technologies with brass knobs all over get excited about elegantly simple little things? How can construction managers used to multi-billion-dollar products settle for insulating innumerable roofs? Will financiers who get seven-figure commissions from giant projects see a future in millions of home improvement loans? There are no easy answers. If the movement doesn't try to help, in a spirit of genuine sympathy, it will come to be seen as a floating enemy by technologists suffering from the personal pain of revamping their skills and the disorientation of a jangled world view. Such a switch is never easy, and we owe it to skilled people, who in good faith devoted their careers to failed technologies, to make their transition easier.

As the hard energy path has crumbled into a litter of failed megaprojects, the soft path has started growing up through the cracks. The initiative has come largely from individuals and community groups. They kept faith and worked hard. Their good ideas—and, equally importantly, their mistakes—spread with phenomenal speed via informal networks and grapevines. Astonishingly, many technical innovations came from people without technical training or institutional backup. (We got a note from a very smart man, with a rudimentary formal education, who had invented various energy devices to help him live in the Alaskan bush. His solar-tempered biogas plant balked at digesting paper, so he looked around his biome, noticed a moose eating a willow tree, recycled the moose, seeded his digester with moose-gut, and wrote us to report that his digester would now happily digest paper and even sizeable chunks of wood. He discovered something important, at least a cellulase enzyme and maybe a lignase, but he's not Exxon.)

Spurred by the most powerful thing in the known universe—four billion minds wrapping around a problem—the pace of technical change has been impossibly swift. We've all needed loose-leaf minds. Remember the mid-seventies, when such unimpeachable sources as the Department of Energy said that passive solar heating, if it worked at all, could only be applied to specially designed new buildings? Hundreds of thousands of people who didn't know that now recline each February in their retrofit greenhouses, munching fresh tomatoes and reflecting on the infirmities of government.

Or remember the ASHRAE 90-75 model building code, the fruit of endless deliberations by eminent energy-in-buildings engineers? It inadvertently out-
lawed most kinds of passive design by limiting window areas (on the theory that windows lost heat no matter which way they faced). But then we found out that the code was wrong in a different way than most folks figured at the time: it turned out that superinsulation would allow all-passive heating without extra south glazings any-how. Meanwhile, the next generation of building codes required east-west orientation and few north windows. But now we know that orientation and shape need not impede passive performance, and new glazings can now provide passive heating just from diffuse skylight, facing due north—or south in the Southern Hemisphere. (This is just one of many cases where regulation, supposedly our friend, turned out to be a hindrance; the market, however imperfect, was a better ally. It is ironic how some of us most acutely aware of what markets don’t or can’t do are now trying to help them do even better what they do so remarkably well.)

The list of surprises is a long one. Remember when utilities didn’t want people to hook up dispersed generators to the grid, lest those ugly, noisy waveforms mess up the nice clean utility power signal? Now we find it’s the other way around, and that we need to protect the dispersed generators from all that crud on the line. Remember when we were told that renewable sources were unreliable—only to find that in many key respects they are more reliable and predictable than modern power stations? Remember when people hadn’t yet developed solar ponds, or ice ponds, and insisted that nothing that simple could possibly work? These and a host of other soft-energy myths die hard, but they are dying steadily.

One basic realization from the past few years’ worldwide analysis of what kinds of energy we need (hence, what’s the best tool for each job) is that the opportunities are vastly greater than had been suspected—not just in technology (such as a full-size 64-kWh/y refrigerator) but in how technologies add up. It’s now common for long-term calculations to show that it’s worth improving national energy efficiencies not just by 10-20 percent, but by 75-90 percent—that is, to reduce national energy needs by severalfold, just by using energy in a way that saves money. Much of the saving is a sum of many individually small savings—not just in heat and liquid fuels, but also, roughly equally, in electricity.

A second surprise: many of us worried, a few years ago, that there might not be enough practical, cost-effective renewable sources to meet all long-term energy needs. Now, to our embarrassment, we’ve discovered that there are probably too many. There are more good renewables than will be needed. Some perfectly good, workable, cost-effective renewables simply won’t make it in the market, because there won’t be enough energy demand to support all of them. Therefore, marketing needs to be much more differentiated, seeking specialized niches where a particular technology may have a unique advantage.

Third, the key cost savings are turning out to come, not from mass production, learning curves, or new technologies (though all of these are important), but mainly from whole-systems views that identify synergisms between energy supply and energy efficiency, between different energy supply technologies, between energy and food, shelter, or other systems (so that several tasks can be done simultaneously by the same equipment). Such integration is vital to low costs, but is very hard to analyze.

But analysis is no substitute for experience. The market has been at once a rewarding and a harsh master. Enterprises to deliver efficiency and renewable technologies have been severely shaken out, and that maturation will continue. Many good small businesses got lost in the shuffle, victims of accidental circumstances. Some technologies got misengineered, badly promoted, badly sold. Many good machines with good economics didn’t make it because the promoter or timing or the structure of the deal were wrong. Many good ideas got mishandled; some will survive false starts, others may get lost. Government demonstration projects often demonstrated how not to do things. Some bad ideas got promoted beyond their worth. Some fraudulent ideas and practices gave solar energy, in certain times and places, a bad name—emphasizing the importance of rigorous quality control and information feedback, so that people know not only what their opportunities are, but also how to shop prudently for them. And homely truths of marketing are being relearned: to compete, one must eliminate extraneous markups and transaction costs, sell in unregulated retail markets wherever possible, and design business plans to be indifferent to the world oil price.

Semantics has turned out to be uncommonly important. At least two-thirds of Americans now realize that “energy conservation” means insulating your roof, not freezing in the dark—doing more with less, not just doing less or doing without. But most of us must still avoid such an ambiguous term: as long as it means curtailment to Messrs. Carter and Reagan, among others, it’s easier to change the word than to change their heads. So we must say “using energy efficiently” (or, for businesspeople, “raising energy productivity”). Yet many more word-traps remain unpruned. Most utility efficiency programs still use “audits” (redolent of the IRS), and many people still confuse themselves by speaking of “producing” oil when what they are actually doing is consuming oil. It’s hard to think straight if we don’t say what we mean.

The enemies of successful soft-energy implementation remain the same: ignorance, sloppiness, overconfidence, insensitivity to others’ perceptions, overselling immature products while underselling mature ones, writing off constituencies rather than speaking to their concerns in their language. What started as a diverse movement is becoming, happily, an ever-shifting symphony of bizarre partnerships and coalitions: generals and hippies both promoting energy self-reliance, Daughters of the American Revolution urging patriotic Americans to weatherstrip, environmentalists cooperating with big business, poor people starting successful soft-energy enterprises. We’re re-proving the wisdom of letting a thousand flowers bloom, of letting native intelligence water the grassroots. There have been some sharp frosts, but the perennials are setting good seed. It now looks as though what makes economic and every other kind of sense is actually going to come to fruition. Now it’s up to us to have fun doing it, laugh often, respect
diversity, and not take ourselves too seriously. 

Jerry Yudelson says that “market penetration” is a male chauvinist term; he prefers “market envelopment.” We should seek not a smothering but a gentle envelopment so discreet, pervasive, and reassuring that people don’t even realize it’s happening. That seems to be the pattern so far. While polls show Canadians’ concern with “the energy crisis” dropping steadily for the past six years, Canadians are spending more and more—over $1000 per household to date—weatherizing their houses. In other words, they’re doing it, not as a panic measure to which their government exhorted them, but as a part of everyday, rational economic behavior. Just so, by the turn of the century, we should all wake up to find soft energy has crept up all around us, not as an exotic intruder, not as a special effort, but as a common-place reality, one that can subtly nurture a gradual but comprehensive change in how we see the world and our place within it.

Soft energy will continue to teach us, as Lao-tse said some two and a half millennia ago, that Leaders are best when people scarcely know they exist, not so good when people obey and acclaim them, worst when people despise them. Fail to honor people, they fail to honor you. But of good leaders who talk little, when their work is done, their task fulfilled, the people will all say: We did this ourselves.

Amory and Hunter Lovins are internationally known energy consultants.

---

Economic Development
by Harriet Barlow

We learned the difficult lesson that commitment is not a substitute for competence and that quality is not ensured by philosophical correctness.

If you are titillated by contradictions, you’ll thrill to the history of the alternative movement’s forays into the arena of economic development.

Consider the dynamics: anarchists, libertarians, individualists, anti-profiteers, technologists, transformationalists, and how-to people trying to integrate the values of stewardship, equity, democracy, and self-reliance into the production and service sectors of their communities. The miracle is that occasionally, the alchemy worked. Business was done, and done well.

We set out a decade ago with immodest goals and modest know-how. Bonded by our values, we intended to translate the wisdom and guidance of E. F. Schumacher, Hazel Henderson, Murray Bookchin, and Tom Bender into productive work.

We stepped aside from the worlds of the Akron steel worker and the Boeing engineer and the unemployed black youth, certain that in our limited context we could demonstrate an ecological strategy and practice of economic development that, once seen, could transform society.

As of this writing, we have not restructured the economic system. Any way you keep score, the economy is in a sorrier state than it was 10 years ago. Capital is more concentrated and those who control it are less accountable. More people are unemployed, and the underground economy we so romanticize cannot sustain the growing underclass.

We have created few jobs. We have upended no dinosaurs (I don’t think we can claim credit for the sorry state of the nuclear power industry), and our one major institutional effort in the economic development area, the Co-op Bank, was botched.

We were long on values and short on skills. The categories in which we did best were those attempts at building community economics, such as land trusts, that depended more on process than on management skills. We knew little about the marketplace realities we eschewed. We resisted learning as if “ethical business” were an oxymoron. I remember the comment of the National Center for Appropriate Technology search committee regarding a job applicant from a major corporation: “We don’t want people who think like that.” No one asked if we needed someone who had the knowledge that applicant had acquired over 15 years of marketing management.

Unfettered by know-how, we set out enthusiastically to establish food, energy, waste, housing, health, and information businesses. We tried worker self-management and collectivity. More on-the-job-learning. We wanted to pull the rug out from under the Bottom Line, but found ourselves straddling it in order to survive.

Contradictions and confusions. We, like the federally funded community development corporations of the sixties, were plagued by a confusion of roles. Did we exist to do business, politics, or service? Does a co-op give credit? Do you hire on the basis of need, friendship, or competence? Do you carry a product made by an a.t. collective even if a superior product is offered by a Grumman salesperson? We learned the difficult lesson that commitment is not a substitute for competence and that quality is not ensured by philosophical correctness.

A similar confusion sprang from our schizophrenic relationship to the grant economy. Only a handful of Steve Baers held back from grant funding. In 1980, a
400-page book called *People Power* described the spectrum of economic development projects that had sprung up across the country. Virtually every one received federal, local, or private grants. When the grants disappeared, so did the enterprises.

Unlike many of our ilk (including many recipients), I was never philosophically opposed to grant funding. Being of the “all money is blood money and all money with strings hangs you” school, I encouraged and participated in the quest for riches. My widely shared error was a failure to distinguish between funding and financing. Grants kept us in the redistributional stream, while we wanted to become part of the productive sector. Financing demands a different “head set,” one that tells in hiring, accounting, and planning functions. I would still seek a grant, but think that development means working toward independence, and would organize the enterprise accordingly.

*Working Together*, published by the recently exterminated California Office of Appropriate Technology, tells the happy tale of numerous economic development successes in the Golden State. Some of the projects will undoubtedly suffer from the changed political climate, but those that survive will do so because they underpin their social concern with business acumen.

The folks at Seattle Recycling, Inc. (SRI), started out as naive and inexperienced as the rest of us. They graduated from their learning period and reshaped their environmental service group into a highly successful recycling business. It provides jobs to low-income residents and recycles income within the community. SRI’s founders capitalized the business with their own savings and with financing from private investors.

That kind of achievement should be applauded. But the rumblings continue. If a profit is made, is the cause furthered? We can point to businesses that are models of “appropriateness.” The Smith and Hawken Tool Company in California, Travis Price’s solar firm in Maryland, and Garden Way Books in Vermont should reassure us that right livelihood can include profit. The challenge of economic development is to wed the people who have built value-based businesses with the resources of the community. They have the skills to make things happen.

If we learn the business of doing business, we will still have to do the work to translate that achievement into structural economic change.

I confess, I cannot let go of the vision of a transformed society. Grey hair and all, I still want to help make it happen. I’ve come to the conclusion after these 10 years of effort that without a broad-based political constituency to establish an ideology of equity, democracy, and stewardship, economic development cannot amount to more than a hill of shekels.

Another confession: I’m discouraged by the unaligned nature of our work to date. Our failure to respect the role of capital, our mistrust of others’ experience in the business/labor sectors, and our disdain for mass efforts—all have weakened our ability to introduce our values into the world in which we live. Maybe it’s a function of that wild individualism that got us into this work in the first place.

Rather than evaluating our record on the basis of total acreage in land trust or number of alternative businesses in the black, let’s judge ourselves by our commitment to lending our knowledge and talents to the total stream of progressive energy in our society. Appropriate economic development will follow.

Harriet Barlow is director of the Blue Mountain Center, a working community of writers and artists in Blue Mountain Lake, New York. She previously was administrative director of the Institute for Local Self-Reliance in Washington, D.C.

---

**Shelter**

by Tom Bender

Some beautiful examples of simpler living patterns have emerged, but they have generally been overshadowed by publicity given to gargantuan eight-bedroom/quad-garage/hydro-spa palaces.

Exactly 10 years ago, I handed out to my architecture design students a paper I had written called “Living Lightly: Energy Conservation in Housing.” It made outlandish claims—that we could easily reduce our energy use in housing and connected activities by more than 90 percent, that we could cut our water use by 75 percent, reduce economic costs, solve other sewage and solid waste problems, and end up healthier, happier, and saner.

“Living Lightly” chronicled an experimental solar/conservation house our students had built the year before, documented research already done by many other people, and pulled together a picture of what was truly possible. At that time (back before the first “oil crisis”), the most favorable energy projects still seemed to show the only reductions possible in energy use were reductions in the *rate of increase!* Almost everyone thought we were crazy.

Ten years has left all that in the dust. All we predicted has been accomplished, and more. Houses are now
being built in every region of the country—to the high-
est standards of comfort and convenience—that are
warmed entirely by body heat and waste heat from
appliances. Energy conservation in housing has proved
so successful and economical that it is now officially
expected to provide for almost all of the projected energy
growth in the Pacific Northwest for the next 20 years!
Humble fiberglass insulation has triumphed over multi-
billion-dollar nuclear power plants.

As far as energy is concerned, improvements in
housing have been among the shining stars of the last
decade—worked out in grassroots fashion, contrary to
every government policy, and adapted to the specific
needs and potentials of different bioregions. Natural
landscaping, cooling tubes, and thermal flywheels have
developed in the South, passive solar in the Mountain
cold-water washing with improved soaps. Personally,
clothes washing has dropped dramatically because of
refrigerators are now available, while energy use for
75 percent energy savings). Task lighting, spot lights,
and lower ambient lighting levels have become com-
monplace. Considerably more efficient furnaces and
refrigerators are now available, while energy use for
clothes washing has dropped dramatically because of
cold-water washing with improved soaps. Personally,
the most heart-warming innovation is our Vermont
Castings woodstove, built from melted-down recycled
Petrog pig engines!

Little attention has been given to community aspects
of housing (in spite of solar suburbs, townhouses, and
gentrified urban neighborhoods), and this seems unlike-
ly to change until more people take sledge hammers to
their televisions, get interested in their neighbors, and
decide to give up some of their individualized lifestyles
to gain some benefits of community.

Ten years ago, counterculture building materials and
processes were in high fashion—domes; hand-hewn
mortise and tenon wood frames; salvaged wood, win-
dows, and building parts. These have matured and
found more proper use. Mortise and tenon framed
housing has survived its early hypsters and developed
its own genre of sophisticated tools (adapted from Japa-
nese carpentry tools). Such houses are now built by the
hundreds. Underground housing has matured techni-
cally, and people are starting to build underground for
the ecological benefits rather than for energy savings,
which are available much more cheaply through super-
insulation. Though the dome hypsters have left the
scene, along with the quick-n-dirty builders, domes are
still being built and built well. They’re hard to roof and
trim out, but so are a lot of other homes. Recycled mate-
rials are finding more proper use. There is more demand
for them and less material available. We’ve learned to
use the materials as they were intended instead of
letting interior doors and windows rot by using them on
building exteriors.

In general, there has been a marked increase in build-
ing care, with journals such as Fine Homebuilding catalyz-
ing networking on more durable construction and better
building techniques. Some techniques, such as rammed
earth, have become commercially viable, while others,
like cement vaults, have remained in experimental
stages.

Some early hopes, like active solar space heating,
have been generally superseded by better and simpler
techniques. Others, like wind electricity, have yet to
find a proper economical and technological fit, and still
others, such as photoelectric cells, may or may not reach
general application. Alternative sanitation has only
achieved limited success to date. Compost toilet per-
formance, economics, and public acceptance have not
lived up to early expectations. The public and the profes-
sional press still want to ignore the problems and refuse
to publish any comprehensive look at the alternatives
now available.

One area in particular from the last decade’s agenda
still remains for major action—economics. Economics is
to the coming decade what energy was to the last.
Housing has played a very central role both technically
and in developing public acceptance of basic restruc-
turing of our energy sensibilities. It can perform the
same or an even greater role in reworking our economic
structures. We are soon going to realize that we don’t
have to work for 10 years of our lives just to pay mort-
gage interest on our homes. We’re going to discover the
benefits that durability can give in reducing the econom-
ic costs of housing and other things we make, and we’re
going to learn that housing costs can be reduced by 90
percent. (Yep, I’ll make the same wager on this as I did
10 years ago on energy use!) And then a great house of
cards is going to come crashing down. The whole finan-
cial con-game we’ve been led to confuse with economics
is going to become visible and lead to a lot of basic
rethinking and redoing.

We’re still a long way from living in simple harmony
with our hearts, our neighbors, and our surroundings,
but we’ve made incredible progress in the last 10 years.
What’s more, we haven’t done it in isolation, but used
our efforts simultaneously to build a successful alterna-
tive to nuclear power, change a nation’s consciousness
about energy, and make visible the interconnectedness
of sewage, solid waste, resource, transportation, urban,
and agricultural problems. And we've shown what can be achieved by a small number of people with limited resources. We've done it and done it well. Let's celebrate, and move on... there's more to do!

Tom Bender is an architect, building inspector, and writer. He was an editor of RAIN from 1975 to 1979.

Gary Snyder reminded us that the “alternative” we advocated was more in harmony with the roots of human culture than the exploitive attitudes toward land use and food production reinforced by our industrial economy.

The decade of the seventies ended with the publication of Masanobu Fukuoka’s *The One-Straw Revolution* and Bill Mollison’s *Permaculture I* and *Permaculture II*. These books provided the concepts and strategies for the creation of agricultural landscapes that embody the diversity, richness, and stability of natural ecosystems.

More than anything else, the past decade has taught me to emphasize the word culture in agriculture. Agriculture is not reserved for the few, but is everyone's concern, and more and more people are getting involved. When we think and talk of sustainable agriculture, our goal is the creation of a sustainable and enduring culture, a culture in which all people intuitively understand and celebrate our vital connection with the Earth.

Despite all the philosophy, the real challenge has been to put ideas into practice. A burst of enthusiasm and naivete led thousands of people to try farming and homesteading in the past decade. The first flush of the back-to-the-land movement has passed, however, as weary veterans have learned firsthand about the isolation, hard labor, and meager economic returns that have driven millions of people off the land, both in this country and around the world.

As Wendell Berry said, we are caught in “a farmer-killing and land-killing economy.” Coming to grips with the harsh economic realities of our times will be one of our greatest challenges in the years ahead. It is essential to give more people access to land and to strengthen alternative marketing techniques. The recent explosive growth of farmers’ markets and cooperative marketing ventures around the country is a step in the right direction. New approaches, such as trading networks and community-owned farms, are being created and will have increasing impact in the years to come.

One major change in the past decade has been a new awareness that people don’t have to move to the country to produce a significant amount of food. Agriculture happens wherever people are growing food—on windowsills and rooftops, in backyard plots, and in community gardens. Sunflowers, zucchini, and neighborhood harvest fairs are becoming as much a part of the urban scene as skyscrapers and traffic jams. The latest surveys report that the majority of U.S. families are now planting food gardens, with a productivity that is having an economic impact. It is estimated that, in 1982, 32 million families in the United States produced $17 billion worth of food in home and community gardens.

The Agribusiness myth that 1 percent of the nation’s...
population on the farms is feeding the other 99 percent through the miracle of modern technology is being shattered. This is rapidly becoming a nation that feeds itself. The family garden and good, fresh food are becoming new status symbols—a trend with survival potential for us all. People have now begun looking beyond their backyards to assess the productive potential of entire neighborhoods and cities. The Massachusetts Fruition Project is one example of where people are being encouraged to establish public access food plants throughout their communities.

Our greatest challenge is to continue making sustainable agriculture an element of public policy. Publication of the U.S. Department of Agriculture's Report and Recommendations on Organic Farming (1980) was a major step in making the need for new approaches to agriculture a political issue. This has been followed by the introduction of legislation in Congress to fund research on less energy-intensive farming practices. The Institute for Alternative Agriculture (9200 Edmonston Road, Suite 117, Greenbelt, MD 20770) was formed last year to assist in the coordination of such political efforts as well as the exchange of technical information on a national level.

Preserving the land and encouraging the involvement of more people in food production is the goal of the sustainable agriculture movement. Realizing the promise of the Earth will require visioning of the role of agriculture in our communities. It will also require that we overcome the specialization of the Industrial Era and heal the rift that has separated producers from consumers, and almost everyone from intimate association with the land.

Mark Musick is one of the founders of Tilth and edited that association's newsletter for several years. He is currently applying natural farm concepts on a small farm in western Washington state.

---

Information/ Communications
by Sandy Emerson

Today, on the eve of Big Brother Year, neither the fondest dreams nor the most paranoid nightmares about the social effects of microcomputers have come to pass. For one thing, the hardware and software are still too expensive, the phone lines and modems too unreliable, and the connect charges far too high for easy, widespread networking. Long after they might have become commonplace, each new Videotex trial or new service from The Source is still perceived as an experiment, a novelty for the self-chosen few.

Of course automatic tellers and word-processing equipment have made substantial incursions into everyday life. Be this good or bad, the more significant fact is the road not yet taken—networking. Such projects as the Community Memory public-access computer network in San Francisco, although vastly overdue by the timelines they continue to publish every few years, are still not too late. (As Tom Robbins says in Still Life with Woodpecker, "It's never too late to have a happy childhood.")

Community Memory Project

Since I have been affiliated with Community Memory for the past five years, I will try (but fail) to resist this opportunity to tell you what's happening with us these days.

Community Memory is designed as a powerful and public system for communications and information exchange. Its medium will be computer technology: a network of relatively small and cheap computers, each connected to a dozen or more terminals located mostly in public places such as neighborhood centers, cafes, bookstores, and libraries. Messages on the Community Memory system might include: announcements and comments on current events, entertainment, and restaurants; debates about community and political activities; listings of community resources; information about bartering, buying, selling, and renting; notices about groups being formed; or graffiti, poems, dialogues, and group discussions ("multilogues"). Since the users themselves are the source of information in the Commu-
Community Memory, the system is not subject to the various kinds of constraints imposed by commercial "information providers."

The first Community Memory node is now scheduled to begin operation in the San Francisco Bay Area in late 1983. It will serve as a pilot test and demonstration of the system. This demonstration has been a long time coming. The project began nearly a decade ago with a 14-month field test using terminals in two Berkeley stores and a branch of the San Francisco Public Library. The system received enthusiastic response and heavy use, but was discontinued in 1975 because it was based on expensive, obsolete computers and programs that would not allow for expansion or replication. A few years later, the Community Memory Project was revitalized and began work to create appropriate software for the current generation of smaller, cheaper, more powerful computers. The core of the Community Memory database software is now complete.

The world into which we are now introducing the Community Memory system has changed greatly since that first field test in 1974. Then, computers themselves were a novelty, and "computerphobia" ran wild. In the present Year of the Computer, we're vying for attention with video games and loud promises of a personal computer in every home. Now we must cope with "computerphilia": the notion that pushing a few keys on a terminal will liberate people, make their jobs more interesting, expand their information horizons, and give them unlimited powers. Not only that, but computers are also supposed to rescue the economy and prove that we need not yet awaken from the American Dream.

As we introduce Community Memory, we'll stress that its focus is communications, not data processing. Data processing is needed, but, in our opinion, it is not the best way to explore the liberatory potentials of computer technology. Unfortunately, we doubt that even the potentials of a network of small computers can be fully realized within the status quo. In our society, computer technology is most often used to keep track of people, to put them out of work, to control them, and, in the case of military uses, to threaten them. The last thing we want is for the existence of Community Memory somehow to obscure these facts.

Computer communications networks that bear some technical resemblance to Community Memory are fast being developed under the sponsorship of governments. Field testing by corporate conglomerates in the United States, Canada, and Europe is underway. These Videotex networks and other information utilities will soon provide teleshopping, telebanking, and telestudying—but not much in the way of interactive communications.

Community Memory differs from these commercial systems by virtue of its public nature—its openness and its dependence on the users of the system. The contents of the Community Memory database will come directly from the public, and each user will have full interactive access to the database. The owners of the Community Memory network will be community or nonprofit groups, who will jointly determine how the system develops, how it's run, and how it is supported.

Community Memory is an alternative information utility that seeks to establish a different relationship with the public it serves. We hope the project will be a forceful enough example of the potentials of the technology to provide demands for similar interactive services from users of private information utilities.

Computer Networks and Bulletin Boards

The freely available "electronic bulletin boards" that computer hobbyists use seem to be much more devoted to the public interest than the commercial networks. Among the recent developments in community computer networks and bulletin boards are the Apple Community Grants Program and Communitree. A focus on networking is mandatory for recipients of Apple's Community Grants. Thirty-nine community groups from California to New York have been awarded grants; these groups will form nine networks focusing on disabled people, affordable housing, donated food, youth, arms control, etc. Apple grant recipients receive an Apple IIe system and other hardware and software. (For information, contact Mark Vermilion at: Community Affairs Program, Apple Computer M/S 23-L, 20525 Mariani Avenue, Cupertino, CA 95014.)

The Communitree bulletin board software for building small-scale networks via tree-structured conferencing continues to propagate in many different communities of interest. Any group or individual can start a Communitree network. Such networks are telephone accessed and autonomously managed. There is no internetworking, yet. (Contact Dean Gengle at 415/861-TREE.)

Other Community Computer Programs

A number of other organizations around the country provide community computer services or publish periodicals of interest to community groups. Here are a few examples:

• The Public Interest Commuter Association (PICA) has an excellent magazine called Nexus. The publication details generally positive responses to computerization from nonprofit organizations. (PICA, 122 Maryland Ave., NE, Washington, DC 20002.)

• Peter Grand runs a business called Community Communications in conjunction with San Francisco's Media Alliance, a writers' and editors' organization. Grand teaches word processing, BASIC, and computer graphics, and provides advice on selecting and using a home computer system. (Media Alliance, Bldg. D, Fort Mason, San Francisco, CA 94123.)

• Computer Use in Social Services Network (CUSS) is a publication that reviews uses of computers for information and referral; also contains software reviews and user group reports. (Information from Dick Schoech, UTA, P.O. Box 19129, Arlington, TX 76019.)

What's Next

The fingernails of the folks at Community Memory get tougher every year from hanging on so hard. Despite delays and regressions, the collective has munched its way through five years of weekly dinner meetings and semi-annual computer shows, done business without bosses or the doubtful benefit of parliamentary proce-
The movement to recycle consumer goods has made great strides since its rekindling in the volunteer efforts of Earth Day activists. Although not yet as institutionalized as industrial waste recovery (the activities of scrap metal processors, for example), residential waste recycling has taken on a professional approach. While citizen groups and nonprofit organizations are still instrumental in providing recycling services in many communities, a growing number of businesses operate post-consumer waste recycling programs in the United States. In addition to the neighborhood donation recycling centers, facilities that buy recyclable commodities directly from citizens are popular. And even more noteworthy are the nearly 400 programs developed since 1972 to collect materials at the curb in residential areas.

These accomplishments may be best reflected in the response of industry to such recycling developments. Industries have expanded their use of secondary (recyclable) materials in the manufacture of goods. There are presently eight paper mills in North America that recycle old newspapers into newsprint, five of which have been built in the last eight years. Used glass containers are now incorporated into new jars and bottles at 100 U.S. glass plants. And more impressive, 50 percent of all-aluminum beverage cans are now recycled, compared to less than 10 percent a decade ago.

A closer look at the successes in recycling gives a brief history of the past decade and provides a basis for predicting the future. A notable achievement has been the adoption of beverage container deposit laws in nine states. Starting in the small states of Oregon and Vermont, bottle and can deposits have significantly boosted container recycling for 20 percent of this nation's population, including the residents of Michigan, New York, and Massachusetts. Even in states where citizen initiatives or lobbying for such laws have failed, the efforts have spurred industry action to increase recycling.

The high recycling rate for aluminum cans serves as a model for reclamation of other commodities. The 50 percent rate not only exceeds expectations, but stretches what even just a few years ago industry officials thought was achievable. In order to recoup the 96 percent energy savings of recycling cans, the aluminum companies have launched aggressive promotional campaigns along with providing convenient facilities and high prices for the light metal.

Although the latter two factors—available facilities and good prices—aid citizen recycling efforts, they are also crucial to for-profit operations. We can all expend on the significant objectives of recycling—conservation of energy and resources—but the nuts and bolts of recycling is the collection, processing, and transport of materials to manufacturers willing to use the secondary resources. The proximity of markets that pay a fair price greatly enhances recycling opportunities in a specific area. Given these facts, the expansion of markets takes on more importance.

Throughout the decade, recycling operators have become more professional and sophisticated. They have expanded their services to meet public needs and have improved the efficiency of their operations through investments in buildings, processing equipment, and vehicles. While small recycling firms have developed their programs, the personnel have in many cases actively participated in local solid waste management planning. This continued community involvement has been another recycling success.

Convenience is a key to getting more people to recycle, and the most accessible recycling programs collect material right at the citizen's home. Curbside recycling collection programs are operated throughout the U.S. and Canada and range from those that only handle newspaper to ones that handle waste paper, glass, cans, cardboard boxes, motor oil, and compostable organics. Such programs not only increase the citizen participation and recovery rates in recycling, they serve to strengthen the link of recycling to traditional waste management practices.

Integral to the successes in recycling is the now-common public perception that wastes (particularly hazardous wastes) are a problem. Despite this growing awareness, a failure in recycling has been the inability of many public officials and much of the electorate to analyze our wasteful behavior, as seen in the defeat of some container deposit legislation.

In addition, contemporary remedial actions to deal with the waste problem have been ineffectively developed. An often-advanced "solution" is resource recovery from wastes, or the processing and burning of garbage to produce energy. This over-engineered,
Bioregional Planning

by Michael Helm

The truth is, we are still at the very beginning of developing a bioregional budget . . . we need to know what an inch of topsoil or an acre-foot of water are worth.

Bioregionalism is not so much a fixed ideology as a diverse set of evolving watershed notions informed by a sense of place. If there is a cardinal principle involved in bioregional planning, it resides in a steadfast appreciation of the importance of diversity. Politically this means that bioregionalism can never be a centrally directed movement. It is grassroots by definition. Only those who inhabit and are informed by the places where they live are in a position to discover what is appropriate to them. Our teachers are the full range of animal, mineral, and botanical presences with which we daily come in contact. Taken together these elements make up the community upon which any bioregional planning must be based.

Our challenge is to help evolve a work-a-play awareness that celebrates, maintains, and restores the planet's natural provision and diversity. This is probably the work of several lifetimes, so we will need all the attention, patience, persistence, help, and humor we can muster. Along the way, we can be sustained as much by the skills of an Appalachian hillbilly as by the leap of a Pacific salmon, and as much by the wisdom of a Native American elder as by the data of a New Age scientist. Even more, we must guard against the arrogance that can naturally stem from enthusiasm. We are all far more ignorant than wise.

The past 10 years, it seems to me, have primarily been ones of self-education and experimentation. We have slowly been learning how to create a new balance without unloading a logjam that would sweep us all away. Like a child tentatively learning to walk, we have had to learn that our food and water have a deeper connection than the local Safeway or our water taps. We have had to discover what is naturally produced where we live, as well as what has been culturally superimposed. The truth is, we are still at the very beginning of developing an alternative economics, a bioregional budget, for understanding what is produced in our watersheds and what it truly costs us to live where we do in sustainable terms. Before we can plan both bioregionally and intelligently, we need to know such things as what an inch of topsoil, an acre-foot of water, a slab of concrete are worth. What do they really cost?

In my work with Planet Drum Foundation, it has become clear that there is a rich underground sprouting throughout the land. People are establishing native seed banks, pioneering in reforestation and fisheries enhancement, creating urban community gardens and alternative health practices, recycling urban “wastes,” and inventing more place-related technologies. As an adjunct to this there has been a veritable bloom of bioregionally informed publications. Among these have been such journals as Coyote out of Tucson, RAIN out of Portland, Heartland out of Chicago, Upriver/Dowriver and Siskiyou Country out of northern California, Katuah out of the Carolinas, Ozarkia, numerous food co-op and rural publications, and, of course, Planet Drum's...
networking tabloid, Raise the Stakes. It seems reasonable to conclude, as Siskiyou Country editor G. Pedro Tama has, "that the underground press of the sixties and seventies is rapidly becoming the bioregional press of the 1980s." In addition, numerous bioregional study groups are active in such diverse places as Los Angeles, San Antonio, Kansas, New York, and British Columbia.

Besides involvement in transformative work, much of our energy has gone toward resisting the still dominant inertia of runaway industrialism and the short-term covetous attitudes that it depends upon and fosters. Too many of us are still little more than transplanted migrants, corporate waifs, waiting for our next paycheck. While many have settled into rural areas and begun forming land-based communities, everyone feels the economic knot tightening around them. Finding good work to do, that pays the rent, remains both our greatest failure and greatest continuing opportunity. Rather than accepting a monocultural definition of career, many people are discovering that they are richer for doing two or three different kinds of work, trading with neighbors, and keeping an eye out for what needs to be done. It is continually surprising how one thing leads to another. Beyond subsistence, people are discovering a new definition of wealth. How large, and what the limits of this underground economy are, can't be gauged by the GNP.

Politically the story for most of us is a mixed bag. Here, in northern California, for example, 92 percent of the electorate voted No and helped stop the Peripheral Canal with its intended theft of the Sacramento River's water for use by King Cotton in the desert lands near Bakersfield. But we also got malathion sprayed at tree-top level by midnight helicopters in Oakland during the Agribusiness war against the Medfly. The latter operation was a graphic reminder that what is routinely visited upon rural areas can come home to roost in urban ones.

Everywhere in America this kind of pattern is repeated. What one is reminded of daily is that bioregional transformation can only be ensured through a widespread understanding by local people of their own long-term self-interest. Learning our facts, getting the information out, and making new allies are all part of the evolving art of community self-regulation. Finding friends in the corporate and governmental structure who want to be on the transforming side is also part of the challenge. The danger of political burnout and disillusionment is always present. Many of us have wisely come to a sense of our limits. We have learned to choose an area of bioregional importance and stick with it. I have chosen to become a water guardian. Others have chosen to resist nuclear power, defend a forest, champion a plant or animal species, or monitor toxic wastes. The emerging principle here seems to be to pledge ourselves for a certain amount of time and labor to a watershed issue or presence that interests us without feeling remiss that we aren't actively involved in 37 other ones. The deeper we understand one aspect of a watershed, the more we come to appreciate its interdependence with all others. In the process we learn from each other. What I am cautioning against here is the 24-hour-a-day grind of the politico. That kind of fanatical commitment denies the diversity within ourselves that is essential to psychic stability.

In terms of future directions, people are beginning to talk about the formation of ad hoc watershed shadow governments. Their function would be to serve as moral stewards for specific watersheds and bioregions and to help inhabitants learn the true cost of any proposed development. Such shadow governments could suggest "green" platforms and economic activity that would be consonant with maintaining and restoring local watersheds and from which political candidates could be judged. Watershed governance of this kind has considerable potential to influence events. Notions of bioregional worth are already being used by rural land management consultants like Leonard Charles and Associates out of Cazadero here in northern California. Their rule of thumb is "maintain diversity, save all the parts." They advise their clients, ranchers and developers, how their land can be multiply used without destroying its balance and complexity.

The future appeal of bioregional notions is likely, in my opinion, to be enhanced by rising energy costs. The principle of regional production for regional use is likely to become an economic necessity as distant markets collapse. Growing lettuce, for example, in the Imperial Valley and then harvesting, packaging, cooling, storing, and transporting it to New York dinner tables is going to become prohibitively expensive. We are going to see the re-emergence of local truck farms producing for nearby urban centers. The recycling of urban "waste," especially valuable metals, paper, plastics, and lumber, is going to make decentralized industry, producing for local use, economically more attractive. In fact, as Urban Ore in Berkeley is discovering, recycling urban waste has the potential to become one of the most profitable urban bioregional activities. I think that as regional agriculture and industry become more attractive again, an economic base for watershed politics is going to develop. We are already beginning to see this with natural foods producers.

How soon local groups and communities will become stable enough to begin thinking about a federal bioregional congress is difficult to say. But the seeds for such a venture are already being planted by Planet Drum and other bioregionally oriented groups. If we want to take the vision far enough, someday we may see a bioregionally reconstituted America that lives within its ecologic means and relinquishes its current imperial role of world policeman.

We may, of course, fail. The destructive capacity of the existing institutional and cultural structure is enormous. Still, I think we can find sustenance in the struggle itself, becoming more alive with each new connection that we make. To paraphrase what the poet Gary Snyder once said, our challenge is to develop a transforming vision so attractive that those on the limiting side won't find their lives worth living.

Michael Helm is a contributing editor to Raise the Stakes, the journal of the Planet Drum Foundation (P.O. Box 31251, San Francisco, CA 94131). He also works with City Miner Books (P.O. Box 176, Berkeley, CA 94701).
BETWEEN THE CUTTING EDGE AND THE FLAKY FRINGE: An Unorthodox Index to RAIN

compiled by Steve Johnson and a Vector Graphic computer

Between the cutting edge and the flaky fringe, RAIN has attempted to ride herd on the evolution of cultural ideas; ideas generated by—well, what should we call it—the counterculture, the aquarian conspiracy, the solar age. It has been called many things. RAIN has attempted to inform its readers of new technologies, public policies, bright ideas, and shining examples of individuals and groups attempting to bring about—however cliché it has sometimes seemed—an equitable society. Economically, it's been a fairly thankless job, and we've watched our ideas—or, as often, the ideas of others we've promoted—turned into maudlin fads. There has been fundamental progress, and then again there have been times when we, and others, have sunk into mere trendiness, enamored with the luxury of being on the cutting edge—perhaps as a substitute for economic benefits. The only way to keep good ideas alive, sometimes, has been to change the ground rules. As ideas have been mainstreamed, co-opted, or perverted, we've reluctantly, or with glee, changed our language to protect the innovators. Often, the ideas have been sincerely tried and tested—then, after living out their usefulness, have died, replaced in good phoenix tradition by new and better notions.

In agriculture, for example, we've watched the ideas about farming evolve into what is simultaneously a more complex and more simple outlook: from organic farming to ecological or biological agriculture (come on folks, make up your minds); from technical solutions to what appears to be almost no solution at all (as in the case of the One-Straw Revolution espoused by Fukuoka).

A complementary growth of ideas can be observed in architecture, from the booming rage for domes in the late sixties, through technoswit solar energy solutions in the seventies, to passive solar and simple conservation ideas in the eighties.

This unorthodox RAIN index is our way of illustrating some of the wisdom and folly of the social movements, technical solutions, and cultural ideas we've monitored over the years. In looking through nine years of RAIN we were astounded by what we found. Did we really tell our readers (in 1975) that Mt. St. Helens might soon explode? Did we really take some of the early solar greenhouse design experiments seriously? We were amazed at the eccentric, generalist, and whimsical nature of the RAIN staff, and at ideas that evolved from backyard pot scheming sessions into New Age industries.

This index was created with the aid of electronic computer technology. Perhaps in a few years, with further computer refinements, it will evolve into a useful tool—a way to monitor change that will provide us with a realistic history, preventing us from reinventing the wheel (or sun). But, then again, who knows? For now, the index entries (including the dates used) are approximations and should be taken with a grain of salt—sea salt (RAIN, Vol. II, No. 3), of course.—SJ

Acclimatization (1976) 
Adhocracies (1974) 
Agro-Ecosystems (1977) 
Appropriate Technology (1975) 
Appropriate Technology Expositions (1979) 
Autonomous Houses (1974) 
Barefoot Doctors (1977) 
Bed and Breakfast (1976) 
Bigfoot (1974) 
Biodegradable Coffins (1976) 
Blazing Showers (1976) 
Brain Revolution (1974) 
Burnout (1976) 
Canned Food as Investment Portfolio (1975) 
Captain Compost (1977) 
Carrying Capacity (1975) 
Catch-44 (1976) 
Catfish Farming (1975) 
Chemical Cuisine (1978) 
Chromatographic Vitamin Analysis (1975) 
City Trees (1976) 
Community Canning Centers (1976) 
Community Gardens (1976) 
Community Sustaining Funds (1976) 
Community Technology (1975) 
Companion Planting (1975) 
Conference Directories (1976) 
Convivial Tools (1975) 
Cost of Growth (1976) 
Cost of Raising Children (1977) 
Credit Unions (1976) 
Death and Dying (1977) 
Depression Prediction (1974) 
Dishwater Tea (1977) 
Dispute Resolution (1983) 
District Heating (1976) 
Earth-Sheltered Housing (1979) 
Earthworm Farming (1977) 
Eco-Decentralist Design (1982) 
Economics and Herbicides (1979) 
Edible Cities (1979) 
Einseinian Culture (1975) 
Elimination of Television (1978) 
Energy Cooperatives (1981) 
Energy Produced by All Cows Burping (1975) 
Energy Slaves (1976) 
Firch Piles (1977) 
Floral Clocks (1975) 
Flushless Toilets (1976) 
Folding Bikes (1975) 
Food Grown in Rocks (1975) 
Forest Farming (1978) 
Foxfire Education Projects (1976) 
French-Intensive Gardening (1975) 
Full-Spectrum Lighting (1977) 
Garbage and Energy Production (1979) 
Gasoline, Prediction $8.00/Gallon (1977) 
Greenlining (1976) 
Helio Strategy (1978) 
Hopalong Cassidy (1976) 
Hospice Movement (1979) 
Household Economy (1977) 
Human Economy (1982) 
Industrial Waste Exchanges (1976) 
Information Networks (1974) 
Integrated Pest Management (1976) 
Intermediate Technology (1974) 
International Migration Patterns (1981) 
Jobs and Energy (1977) 
Kissing Goats (1982) 
Kitsch (1981)
Our recent reader survey shows that many more people read RAIN than actually subscribe. That’s flattering, but we need to increase our circulation in order to bring you another 10 years of means and dreams.

If you send us names of likely subscribers, and they subscribe after receiving a sample copy, we’ll extend your subscription by two issues for each new subscriber. The same offer applies if your name and address appear along with a friend’s new subscription order. This offer is limited to 500 new subscribers per current reader and ends February 19, 1984.
What makes a RAIN article memorable? Sometimes it has to do with a “watershed” quality—a new theme or idea that seems to signal a significant shift in people's way of looking at the world. Sometimes it has to do with a provocative quality—an ability to stir up healthy debate among RAIN's readers. And sometimes there is simply a vivid image or some timeless wisdom that stays in the reader's mind long after the magazine has been filed away for future reference.

We thought about many past RAIN articles as we planned for this special anniversary issue. The selections below and the two articles that immediately follow (“Sharing Smaller Pies” and “An Open Letter to the Ecological Movement”) provide just a sampling of the ideas and images that have made for a memorable first RAIN decade.—JF

From: “Getting Efficient” by Amory Lovins November 1979

Amory Lovins, whose work has appeared in RAIN's pages a number of times since 1976, has a knack for finding images that expose the absurdity of traditional energy strategies more effectively than reams of statistics. We always remember “Getting Efficient” as “the refrigerator article.” You'll see why when you read the excerpt below.

...The conventional wisdom says that insulating our houses better, designing better appliances, better cars, better machinery in factories, we can save something like 20 to 40 percent of our energy and be just as well off. ... However, the conventional wisdom is wrong. It comes from not looking quite carefully enough at how great the opportunities are for using energy more efficiently through what are called “technical fixes”...

Let me take as my text for a moment your refrigerator. ... Around the end of World War II, your refrigerator motor was probably 80 or 90 percent efficient and it sat on top. Nowadays the motor is maybe 50 or 60 percent efficient, probably because the price of electricity to your house has dropped severalfold since then, and the motor sits underneath so its heat goes up into the box. Therefore, your refrigerator probably spends about half of its effort taking away the heat of its own motor! Then the manufacturers have skimped on insulation. ... Because of that, and because it is designed so that when you open the door all the cold air falls out, it frosts up. So your refrigerator probably has in it a lot of electric space heaters which go on now and then to defrost it. And it probably has electric heaters around the door to keep the gasket from sticking because they cannot be bothered to use a Teflon coating. Then the heat gets pumped out the back into a kind of radiator which is usually pressed right into that thin insulation to help the heat get back inside as fast as possible. ... It really is hard to think of a better way to waste energy.

Now if you design the thing properly, it will keep the same amount of food just as cold, and conveniently, using only a sixth as much electricity as now. ... There is an extra capital cost for this factor of six, but you get it back in about three years from your electricity savings. Highly cost effective!

These are the kinds of measures I am talking about throughout the economy—not just in the household—and they add up to very large savings indeed....

From: “The Do-Gooder Dilemma: Inappropriate Technology Transfer” by Laura Stuchinsky November 1980

This critique of the methods and philosophy of a number of international a.t. organizations generated one of the most spirited reader responses—pro and con—of any RAIN article published in recent years.

In reviewing much of the work being done today in international development, it becomes increasingly clear that many a.t. groups focus on technological solutions in lieu of acting on socio-economic problems....

While there is definite value in many of the ideas and tools that are being developed by [such] groups, it is essential that their application be considered in light of the political and social context in which they will be used. Technology is not a neutral process. To the contrary, it is an expression and reinforcement of the cultural and economic patterns from which it derives. As in
the case of foreign aid, inappropriate use of a valuable tool can serve to reinforce and accentuate exploitive and repressive conditions which prevent the poor from assuming the power that is rightfully theirs. Development has been seen as a matter of “things”—tools, resources, training, etc.—yet the inadequacy of this approach is evident. The example of such countries as Cuba, Tanzania, and Nicaragua lends support for a new definition of development, one that ties economic growth to a participatory, democratic process of change. . . .

From: “Resources in Red Nations” an interview with Winona LaDuke February/March 1980

Winona LaDuke helped found Women of All Red Nations (WARN), a Native American organization concerned about government/corporate resource exploitation on Indian lands. In a wide-ranging interview, she provided RAIN with a provocative Native American view of the goals and strategies of white anti-nuclear activists.

. . . I think we understand a lot about America and the way American people are, ‘cause we spend a lot of time looking at it! But Americans have never been forced to look at themselves. . . . What we see with the American no-nukes is . . . Americans are always responding to a crisis situation, like the Vietnam War, and now we get no-nukes. All of a sudden they decided that nuclear power and weapons are a bad idea, and it’s not like coal and nuclear power weren’t going on before, but everybody just got scared about it. So they started looking around for allies and all of a sudden they figure out—lo and behold!—Indians got the uranium, let’s start talking to them! . . .

These people, like no-nukes or environmentalists, a lot of times they look at a symptom. A nuclear plant is a symptom. . . . Weapons plants and all those things are symptoms. . . . None of that stuff is gonna hurt you unless it’s got uranium, and that’s where it’s got to be stopped. That’s what feeds multinational corporations, is resources. . . . New Mexico [is] the number one uranium-producing state in the country—and the Navajos are the ones that produce it. You’re talking about coal, you’re talking about copper, silver, all this stuff that feeds those companies comes from those places, and that’s what has to be stopped if you want to stop this monster. You gotta stop what’s feeding it. . . .

From: “A Hard Look at How-To” by Lloyd Kahn December 1979

Appearing in RAIN the same year as Ken Bossong’s “Hazards of Solar Energy,” this critique of the hype and high hopes that often accompanied appropriate technology projects during the seventies seemed to signal the emergence of a new awareness and maturity in the a.t. movement.

For more than a decade we have been swamped with accounts of how well things work. . . . Bookstores are loaded with glowing accounts of how to do virtually everything. No problems! My new house/organic homestead/solar heater work great and here’s how I did it and you can do the same. No one seems to be asking critical questions. . . .

. . . Do I conclude that all of the how-to literature on alternative food/shelter/energy is untrustworthy? Or that organic farming won’t work, compost privies lead to disease, and solar heating is a sham? Not at all. It’s not that I think you shouldn’t work with used materials, or move to the country, or save the kitchen sink water. But I do think inexperienced people need to know what they’re up against, and not hyped along into undertaking ventures based on incomplete information. . . .

In retrospect, the sixties may have been a time of awakening, of communication of new concepts, and the seventies the years of testing and reflection. The 1980s could be the time when we begin to apply what we have learned. . . . We can profit from honest disclosure of past mistakes. . . .

From: “Helping Ourselves: Reality vs. Rhetoric” an interview with Bruce Stokes January 1982

Bruce Stokes’ 1981 book, Helping Ourselves: Local Solutions to Global Problems, was a particular inspiration to us at RAIN as we prepared our own book on community self-reliance, Knowing Home. In this interview, Stokes described what he considered to be the principal value of the self-help projects being carried out in the United States and around the world.

. . . Even if you can’t show a direct one-on-one relationship where one activity builds to the next and all-of-a-sudden you have a self-reliant local community, people are being trained in citizenship. . . . People are learning how to organize meetings, how to assert themselves, how to use power, how to identify and solve problems. Those are skills which are terribly useful in crisis situations. As society itself moves toward an economy that is increasingly unsustainable and unstable, an environmental situation that is increasingly dangerous, and a situation where the resource base is being undermined dramatically, we need citizens who are trained in the skills of crisis management. Even if that community garden we organize doesn’t do a whole lot to solve food problems, people have learned some skills, and these people are going to be around to react to the next major crisis which happens in their community or in the country at large.

I think as we face those crises, the tendency is going to be to move toward centralized responses—highly authoritarian. They may be corporate state responses, they may be socialist state responses, but in either case, they are centralized responses—and that’s undemocratic by its very nature. We need alternatives. We need people to say “No, we can handle this ourselves,” and in fact repulse attempts by the centralized authority to impose a response on the community. That’s the most important result of all these self-reliance activities going on: that people learn the rules of citizenship so that we can ensure that we’re a democracy not only in name, but in fact.
Sharing Smaller Pies

by Tom Bender

Tom Bender, a RAIN editor from 1975 to 1979, has provided some of our most memorable articles over the years. This excerpt from his 1975 book, Sharing Smaller Pies, marked his first appearance in RAIN's pages.

Originally self-published and intended for distribution to a small circle of friends, Sharing Smaller Pies received unexpected attention and was cited, reviewed, or quoted in a number of publications. Today, RAIN's 1975 description of it still stands up well: "Smaller Pies is one of the most succinct statements on the evident choices before us . . . containing Tom Bender's usual startlingly clear sentences. . . ."—JF

(First appeared in RAIN, April 1975)

Our ability to develop a culture that can endure beyond our own lifetimes depends upon our coming to a new understanding of what is desirable for a harmonious and sustainable relationship with the systems that support our lives.

STEWARDSHIP, not progress. We have valued progress highly during our period of growth, as we have known that changes were unavoidable, and have needed an orientation that could help us adjust to and assist those changes. Progress assumes that the future will be better— which at the same time creates dissatisfaction with the present and tells us that NOW isn't as good. As a result, we are prompted to work harder to get what the future can offer, but lose our ability to enjoy what we now have. We also lose a sense that we ourselves, and what we have and do, are really good. We expect the rewards from what we do to come in the future rather than from the doing of it, and then become frustrated when most of those dreams cannot be attained. The "future" always continues to lie in the future. Progress is really a euphemism for always believing that what we value and seek today is better than what we valued before or what anyone else has ever sought or valued.

Stewardship, in contrast to progress, elicits attentive care and concern for the present—for understanding its nature and for best developing, nurturing, and protecting its possibilities. Such actions unavoidably insure the best possible future as a by-product of enjoyment and satisfaction from the present.

The government of a society has a fundamental responsibility, which we have neglected, for stewardship— particularly for the biophysical systems that support our society. It is the only organ of society which can protect those systems and protect future citizens of the society from loss of their needed resources through the profiteering of present citizens. The government's fundamental obligation in this area is to prevent deterioration in the support capacities of the biophysical systems, maintain in stable and sound fashion their ongoing capabilities, and whenever possible extend those capabilities in terms of quality as well as quantity.
Present and past governments, and those who have profited from their actions, must be accountable for loss to present and future citizens and to the biophysical systems themselves from their actions.

**PEOPLE, not professions.** Our wealth has made it possible for us to institutionalize and professionalize many of our individual responsibilities—a process which is inherently ineffective and most costly, which has proven destructive of individual competence and confidence, and which is affordable only when significant surplus of wealth is available.

We have been able to afford going to expensively trained doctors for every small health problem, rather than learning rudiments of medical skills or taking care to prevent health problems. We have been able to afford expensive police protection rather than handling our problems by ourselves or with our neighbors. We have established professional social workers, lawyers, and educators—and required that everyone use their services even for things we could do ourselves and that are wastes of time and expertise of the professionals. As the wealth that has permitted this becomes less available to us, it will become necessary to deprofessionalize and deinstitutionalize many of these services and again take primary responsibility for them ourselves.

Our institutions have contributed to isolating, buffering, and protecting us from the events of our world. This has on one hand made our lives easier and more secure, and freed us from the continual testing that is part of the dynamic interaction in any natural system. It has also, by these very actions, made us feel isolated, alienated, and rightfully fearful of not being able to meet those continued tests without the aid of our cultural and technical implements.

Our lack of familiarity with all the natural processes of our world and uncertainty of our ability to successfully interact with them aided only by our own intuitive wisdom and skills has enslaved us to those implements and degraded us. We can act confidently and with intuitive rightness only when we aren’t afraid. We can open ourselves to the living interaction that makes our lives rewarding only when we cease to fear what we can’t affect. Fear is only unselfness of our own abilities.

We have to take responsibility OURSELVES for our own lives, actions, health, and learning. We must also take responsibility ourselves for our community and society. There is no other way to operate any aspect of our lives and society without creating dictatorial power that destroys and prevents the unfolding of human nature and that concentrates the ability to make errors without corrective input. No one else shares our perceptions and perspective on what is occurring and its rightness, wrongness, or alternatives. We are the only ones who can give that perspective to the process of determining and directing the pattern of events.

Our institutions can be tools that serve us only when they arise from and sustain the abilities of individuals and remain controlled by them.

**AUSTERITY, not affluence.** Austerity is a principle which does not exclude all enjoyments, only those which are distracting from or destructive of personal relatedness. It is part of a more embracing virtue—friendships or joyfulness, and arises from an awareness that things or tools can destroy rather than enhance grace and joyfulness in personal relations. Affluence, in contrast, does not discriminate between what is wise and useful and what is merely possible. Affluence demands impossible endless growth, both because those things necessary for good relations are foregone for unnecessary things, and because many of those unnecessary things act to damage or destroy the good relations that we desire.

**PERMANENCE, not profit.** Profit, as a criterion of performance, must be replaced by permanence in a world where irreplaceable resources are in scarce supply, for profit always indicates their immediate use, destroying any ability of a society to sustain itself. The only way to place lighter demands on material resources is to place heavier demands on moral resources. Permanence, as a judge of the desirability of actions, requires first that those actions contribute to rather than lessen the continuing quality of the society. Permanence in no way excludes fair reward for one’s work—but distinguishes the profit a person gains based on loss to others from profit derived from a person’s work or contribution to others.

**RESPONSIBILITIES, not rights.** A society—or any relationship—based on rights rather than responsibilities is possible only when the actions involved are insignificant enough to not affect others. Our present society is based upon rights rather than responsibilities, and upon competitive distrust and contractual relationships rather than upon the more complex and cooperative kinds of relationships common in other cultures. These relationships have given us the freedom to very quickly extract and use our material wealth, settle a continent, and develop the structure of cities and civilization.

Any enduring relationship, however, must balance rights with responsibilities to prevent destruction of weaker or less aggressive, yet essential, parts of relationships—whether other people, the biosphere that supports our lives, or the various parts of our own personalities.

Distrust or contractual relationships are the easiest to escape and the most expensive to maintain—requiring the development of elaborate and expensive legal and financial systems—and cannot be the dominant form of relationship in societies that do not have the surplus wealth to afford them. Moral or ethically based relationships; relationships based on cooperation, trust, and love; and the relationships encompassing more than just work, family, education, recreational, or spiritual parts of our lives are more rewarding and satisfying to the people involved. They are also more stable in their contribution to society, vastly easier to maintain, and harder to disrupt. They have always been the most common kinds of relationships between people except under the extreme duress of war or growth.

**BETTERMENT, not biggerment.** Quantitative things, because of the ease of their measurement by external means, have been sought and relied upon as measures of success by our institutionally centered society. We are learning the hard lesson that quantity is no substitute...
for quality in our lives, that qualitative benefits cannot be externalized, and that a society that wishes betterness rather than moreness, and betterment rather than biggerment, must be organized to allow individuals the scope for determining and obtaining what they themselves consider better.

ENOUGHNESS, not moreness. We are learning that too much of a good thing is not a good thing, and that we would often be wiser to determine what is enough rather than how much is possible. When we can learn to be satisfied with the least necessary for happiness, we can lighten our demands on ourselves, on others, and on our surroundings, and make new things possible with what we have released from our covetousness. Our consumption ethic has prevented our thinking about enoughness, in part out of fear of unemployment problems arising from reducing our demands. Employment problems are only a result of choices of energy vs. employment-intensive production processes and arbitrary choices we have made in the patterns of distributing the wealth of our society—both of which can be modified with little fundamental difficulty. Our major goal is to be happy with the least effort—with the least production of goods and services necessary and with the greatest opportunity to employ our time and skills for good rather than for survival. The fewer our wants, the greater our freedom from having to serve them.

LOCALIZATION, not centralization. Centralization, in all kinds of organization, is important during periods of growth when ability to quickly marshal resources and change and direct an organization is important. It is, however, an expensive and ineffective means for dealing with ongoing operations when an excess of energy to operate the system is unavailable. As effectiveness in resolving problems on the scale and location where they occur becomes more important, organization must move to more localized and less institutionalized ways of operation. Even with sufficient resources, the power concentration of centralized systems overpowers the rights of individuals, and has proved to lead to inevitable deterioration of our quality of life.

The size and centralization of many of our organizations has nothing to do with even alleged economics or benefits of scale, and actually often is associated with diseconomics of scale and deterioration of quality of services. Size breeds size, even where it is counterproductive. It is easiest for any organization to deal with others of the same scale and kind of organization, and to create pressures for other organizations to adapt their own mode of operation.

EQUITIZATION, not urbanization. Uncontrollable urbanization has accompanied industrialization in every country where it has occurred. The roots of that urbanization, which has occurred in spite of the desires of both the people and the governments involved, have been twofold: the destruction of traditional means of livelihood by energy slaves and the market control of large corporations, and the unequal availability of employment opportunities and educational, medical, and other services. Neither of these conditions is necessary. The inequity of services has resulted from conscious choices to centralize and professionalize services rather than to manage available resources in a way to ensure equal availability of services in rural as well as urban areas. The destruction of traditional patterns of livelihood has been equally based on conscious and unnecessary choices.

Equity is not only possible, but is necessary to restore choices of where and how one lives. It is necessary to restore alternatives to our unaffordably costly urban systems. It can be achieved through introduction of appropriate technology; through control of organization size; by equalizing income and available wealth; by establishing equal access to learning opportunities, health care, justice, and other services; and by assuring everyone the opportunities for meaningful work. It can be achieved by returning to individuals the responsibility and control of their lives, surroundings, and social, economic, and political systems; by ensuring freedom to not consume or depend upon any systems other than one's own abilities; and by encouraging the ownership of the tools of production by the people who do the work, thus increasing the chances of developing a balanced, affluent, and stable society.

WORK, not leisure. We have considered work to be a negative thing—that the sole function of work was to produce goods and services. To workers it has meant a loss of leisure, something to be minimized while still maintaining income. To the employer it is simply a cost of production, also to be minimized. Yet work is one of our greatest opportunities to contribute to the well-being of ourselves and our community—opportunity to utilize and develop our skills and abilities, opportunity to overcome our self-centeredness through joining with other people in common tasks, as well as opportunity to produce the goods and services needed for a dignified existence. Properly appreciated, work stands in the same relation to the higher faculties as food to the physical body. It nourishes and enlivens us and urges us to produce the best of which we are capable. It furnishes a medium through which to display our scale of values and develop our personality. To strive for leisure rather than work denies that work and leisure are complementary parts of the same living process, and cannot be separated without destroying the joy of work and the bliss of leisure.

From this viewpoint work is something essential to our well-being—something which can and ought to be meaningful, the organization of which in ways which are boring, stultifying, or nerve-wracking is criminal. Opportunity for meaningful work rather than merely a share of the products of work, needs to be assured to every member of our society.

TOOLS, not machines. We need to regain the ability to distinguish between the technologies which aid and those which destroy our ability to seek the ends we wish. We need to discriminate between what are tools and what are machines. The choice of tools and what they do is at root both philosophical and spiritual. Every technology has its own nature and its own effect upon the world around it. Each arises from and supports a particular view of our world.

A tool channels work and experiences through our faculties, allowing us to bring to bear upon them the full
play of our nature—to learn from the work and to infuse it with our purposes and our dreams—and to give the fullest possible opportunity for our physical and mental faculties to experience, experiment, and grow. A tool focuses work so that our energy and attention can be fully employed to our chosen purposes.

Our culture has valued devices that are labor saving and require little skill to operate. By those very measures, such devices are machines which rob us of our opportunity to act, experience, and grow, and to fill our surroundings with the measure of our growth. We need skill-developing rather than labor-saving technologies.

**INDEPENDENCE AND INTERDEPENDENCE.**

Many of the basic values upon which we have tried to build our society have become weakened through the ways they have been interpreted and face the prospect of further weakening through the pressures inevitable in adapting our society to new conditions.

Independence cannot be maintained when we are dependent upon other people or other nations—as long as we are forced to work on others' terms, to consume certain kinds of education to qualify for work, to use automobiles because that kind of transportation system has made even walking dangerous or physically impossible; as long as we are dependent upon fossil fuels to operate our society; as long as we must depend upon resources other than ourselves and the renewable resources of our surroundings, we cannot be independent.

We have also discovered through the power that our wealth has given us that slavery is as enslaving for the master as for the mastered—by becoming DEPENDENT upon the abilities of the slave, whether the slave is human, animal, institutional, or energy slave, we forego developing our own capabilities to be self-sufficient.

In another sense total independence is never possible, for that means total power, which inevitably collides with the wants and power of others. We are also, in reality, dependent upon the natural systems that convert the sun's energy into the food upon which we live. Totally independent individuals may have freedom from organization, but have no special value, no special mission, no special contribution, and no necessary role in the energy flows and relationships of a society that permits greater things than are attainable as individuals. Such freedom results in little respect or value for the individual. Our success and survival on this planet also must recognize the total interdependence that exists between us and the health, disease, wealth, happiness, anger, and frustrations of the others with whom we share this planet.

Two things are important. We must have the CAPABILITY for self-sufficiency—in order to have options, alternatives, self-confidence, and knowledge of how things are related and work and to be able to lighten our demands on others. We must also have the ABILITY to contribute our special skills to the development of interdependent relationships which can benefit all. Trade, as giving of surplus, of what is not necessary, is the only viable resolution of the interrelated problems of independence, interdependence, and slavery.

As we begin to actually make changes, the things we come to find of value are almost the opposite of what we value today. What contributes to stability and soundness and to valued relationships is exactly what prevents and hinders disruption, change, and growth—which have been both necessary and desired under the conditions we have until recently experienced. Meaningful work, localized economies, diversity and richness of employment and community, and controllable, clever, human-centered technologies will become important. Common sense and intuition will be recognized again as more valuable than armies of computers. Community will become more important than individualism and our present actions seen as unsupportably selfish. Strong roots and relationships will become more important than mobility. Buildings and equipment with long life and lower total costs rather than low initial costs will be favored. Cooperation will be seen as more positive, wiser, and less costly than competition. Skill-using will replace labor-saving. We will soon discover that all our present sciences and principles are not unbiased, but are built upon values promoting growth rather than stability, and will need to be modified when quantitative growth is no longer possible. □ □
AN OPEN LETTER TO THE ECOLOGICAL MOVEMENT

by Murray Bookchin

This is not only one of the most important pieces ever published by RAIN—it’s also one of my favorite RAIN "scoops." RAIN asked Murray Bookchin to write this "Open Letter" for the tenth anniversary of Earth Day and the "official" birth of the environmental movement. Appearing at this time of reflection and renewal, the letter generated tremendous interest and was reprinted rapidly and widely in the U.S. and around the world.

Things have changed a bit since the letter was first published in 1980. (At that time, no one really believed, for instance, that Ronald Reagan could ever be elected President.) But most of what Bookchin wrote more than three years ago is just as pertinent today, as 1984 swiftly approaches. His distinction between ecology and environmentalism is one of the key clarifications of the decade. The "managerial radicals" he warned about still plague us. And his vision of humanity as the conscious voice of nature is still as hopeful as we’ve got.

This letter is addressed to you. Do yourself a favor and read it. —Mark Roseland (RAIN editor, 1979-82)

(First appeared in RAIN, April 1980)

With the opening of the eighties, the ecology movement in both the United States and Europe is faced with a serious crisis. This crisis is literally one of its identity and goals, a crisis that painfully challenges the movement’s capacity to fulfill its rich promise of advancing alternatives to the domineering sensibility, the hierarchical political and economic institutions, and the manipulative strategies for social change that have produced the catastrophic split between humanity and nature.

To speak bluntly: the coming decade may well determine whether the ecology movement will be reduced to a decorative appendage of an inherently diseased anti-ecological society, a society riddled by an unbridled need for control, domination, and exploitation of humanity and nature—or, hopefully, whether the ecology movement will become the growing educational arena for a new ecological society based on mutual aid, decentralized communities, a people’s technology, and non-hierarchical, libertarian relations that will yield not only a new harmony between human and human, but between humanity and nature.

Perhaps it may seem presumptuous for a single individual to address himself to a sizable constituency of people who have centered their activities around ecological concerns. But my concern for the future of the ecology movement is not an impersonal or ephemeral one. For nearly 30 years I have written extensively on our growing ecological dislocations. These writings have been reinforced by my activities against the growing use of pesticides and food additives as early as 1952, the problem of nuclear fallout that surfaced with the first hydrogen bomb test in the Pacific in 1954, the radioactive pollution issue that emerged with the Windscale nuclear reactor “incident” in 1956, and Con Edison’s attempt to construct the world’s largest nuclear reactor in the very heart of New York City in 1963. Since then, I have been involved in anti-nuke alliances such as Clamshell and Shad, not to speak of my predecessors: Ecology Action East, whose manifesto, The Power to Destroy, The Power to Create, I wrote in 1969, and the Citizens Committee on Radiation Information, which played a crucial role in stopping the Ravenswood reactor in 1963. Hence, I can hardly be described as an interloper or newcomer to the ecology movement. My remarks in this letter are the product of a very extensive experience as well as my individual concern for ideas that have claimed my attention for decades.

It is my conviction that my work and experience in all of these areas would mean very little if they were limited merely to the issues themselves, however important each one may be in its own right. “No Nukes,” or for that matter, no food additives, no agribusiness, or no nuclear bombs, is simply not enough if our horizon is limited to each one issue alone. Of equal importance is the need to reveal the toxic social causes, values, and inhuman relations that have created a planet which is already vastly poisoned.

Ecology, in my view, has always meant social ecology: the conviction that the very concept of dominating nature stems from the domination of human by human, indeed, of women by men, of the young by their elders, of one ethnic group by another, of society by the state, of the individual by bureaucracy, as well as of one economic class by another or a colonized people by a colonial power. To my thinking, social ecology has to begin its quest for freedom not only in the factory but also in the family, not only in the economy but also in the psyche, not only in the material conditions of life but also in the spiritual ones. Without changing the most molecular relationships in society— namely, those between men and women, adults and children, whites and other ethnic groups, heterosexuals and gays (the list, in fact, is considerable)—society will be riddled by domination even in a socialistic “classless” and “nonexploitative” form. It would be infused by hierarchy even as it celebrated the dubious virtues of “people’s democracies,” “socialism,” and the “public ownership” of
“natural resources.” And as long as hierarchy persists, as long as domination organizes humanity around a system of elites, the project of dominating nature will continue to exist and inevitably lead our planet to ecological extinction.

The emergence of the women’s movement, even more so than the counterculture, the “appropriate” technology crusade and the anti-nuke alliances (I will omit the clean-up escapades of “Earth Day”), points to the very heart of the hierarchical domination that underpins our ecological crisis. Only insofar as a counterculture, an alternate technology or anti-nuke movement rests on the non-hierarchical sensibilities and structures that are most evident in the truly radical tendencies in feminism can the ecology movement realize its rich potential for basic changes in our prevailing anti-ecological society and its values. Only insofar as the ecology movement consciously cultivates an anti-hierarchical and a non-domineering sensibility, structure, and strategy for social change can it retain its very identity as the voice for a new balance between humanity and nature and its goal for a truly ecological society.

This identity and this goal are now faced with serious erosion. Ecology is now fashionable, indeed, faddish—and with this sleazy popularity has emerged a new type of environmentalist hype. From an outlook and movement that at least held the promise of challenging hierarchy and domination have emerged a form of environmentalism that is based more on tinkering with existing institutions, social relations, technologies, and values than on changing them. I use the word “environmentalism” to contrast it with ecology, specifically with social ecology. Where social ecology, in my view, seeks to eliminate the concept of the domination of nature by humanity by eliminating the domination of human by human, environmentalism reflects an “instrumentalist” or technical sensibility in which nature is viewed merely as a passive habitat, an agglomeration of external objects and forces, that must be made more “serviceable” for human use, irrespective of what these uses may be. Environmentalism, in fact, is merely environmental engineering. It does not bring into question the underlying notions of the present society, notably that man must dominate nature. On the contrary, it seeks to facilitate that domination by developing techniques for diminishing the hazards caused by domination. The very notions of hierarchy and domination are obscured by a technical emphasis on “alternative” power sources, structural designs for “conserving” energy, “simple” lifestyles in the name of “limits to growth” that now represent an enormous growth industry in their own right—and, of course, a mushrooming of “ecology”-oriented candidates for political office and “ecology”-oriented parties that are designed not only to engineer nature but also public opinion into an accommodating relationship with the prevailing society.

Nathan Glazer’s “ecological” 24-square-mile solar satellite, O’Neill’s “ecological” spaceships, and DOE’s giant “ecological” windmills, to cite the more blatant examples of this environmentalist mentality, are no more “ecological” than nuclear power plants or agribusiness. If anything, their “ecological” pretensions are all the more dangerous because they are more deceptive and disorienting to the general public. The hoopla about a new “Earth Day” or future “Sun Days” or “Wind Days,” like the pious rhetoric of fast-talking solar contractors and patent-hungry “ecological” inventors, conceals the all-important fact that solar energy, wind power, organic agriculture, holistic health, and “voluntary simplicity” will alter very little in our grotesque imbalance with nature if they leave the patriarchal family, the multinational corporation, the bureaucratic and centralized political structure, the property system, and the prevailing technocratic rationality untouched. Solar power, wind power, methane, and geothermal power are merely power insofar as the devices for using them are needlessly complex, bureaucratically controlled, corporately owned, or institutionally centralized. Admittedly, they are less dangerous to the physical health of human beings than power derived from nuclear and fossil fuels, but they are clearly dangerous to the spiritual, moral, and social health of humanity if they are treated merely as techniques that do not involve new relations between people and nature and within society itself. The designer, the bureaucrat, the corporate executive, and the political careerist do not introduce anything new or ecological in society or in our sensibilities toward Ecology is now fashionable, indeed faddish. With this sleazy popularity has emerged a new type of environmentalist hype.
I am disturbed by a widespread technocratic mentality and political opportunism that threaten to replace social ecology by a new form of social engineering.

Alternate technology, decentralization is reduced to a mere technical stratagem for concealing hierarchy and domination. The “ecological” vision of “municipal control of power,” “nationalization of industry,” not to speak of vague terms like “economic democracy,” may seemingly restrict utilities and corporations, but leaves their overall control of society largely unchallenged. Indeed, even a nationalized corporate structure remains a bureaucratic and hierarchical one.

As an individual who has been deeply involved in ecological issues for decades, I am trying to alert well-intentioned, ecologically oriented people to a profoundly serious problem in our movement. To put my concerns in the most direct form possible: I am disturbed by a widespread technocratic mentality and political opportunism that threaten to replace social ecology by a new form of social engineering. For a time it seemed that the ecology movement might well fulfill its libertarian potential as a movement for a non-hierarchical society. Reinforced by the most advanced tendencies in the feminist, gay, community, and socially radical movements, it seemed that the ecology movement might well begin to focus its efforts on changing the basic structure of our anti-ecological society, not merely on providing more palatable techniques for perpetuating it or institutional cosmetics for concealing its irremediable diseases. The rise of the anti-nuke alliances based on a decentralized network of affinity groups, on a directly democratic decision-making process, and on direct action seemed to support this hope. The problem that faced the movement seemed primarily one of self-education and public education—the need to fully understand the meaning of the affinity group structure as a lasting, family-type form, the full implications of direct democracy, the concept of direct action as more than a “strategy” but as a deeply rooted sensibility, an approach that expresses the fact that everyone has the right to take direct control of society and of her or his everyday life.

Ironically, the opening of the eighties, so rich in its promise of sweeping changes in values and consciousness, has also seen the emergence of a new opportunism, one that threatens to reduce the ecology movement to a mere cosmetic for the present society. Many self-styled “founders” of the anti-nuke alliances (one thinks here especially of the Clamshell Alliance) have become what Andrew Kopkind has described as “managerial radicals”—the manipulators of a political consensus that operates within the system in the very name of opposing it.

The “managerial radical” is not a very new phenomenon. Jerry Brown, like the Kennedy dynasty, has practiced the art in the political field for years. What is striking about the current crop is the extent to which “managerial radicals” come from important radical social movements of the sixties and, more significantly, from the ecology movement of the seventies. The radicals and idealists of the 1930s required decades to reach the middle-aged cynicism needed for capitulation, and they had the honesty to admit it in public. Former members of SDS and ecology action groups capitulate in their late youth or early maturity—and write their “embittered” biographies at 25, 30, or 35 years of age, spiced with rationalizations for their surrender to the status quo. Tom Hayden hardly requires much criticism, as his arguments against direct action at Seabrook last fall attest. Perhaps worse is the emergence of Barry Commoner’s “Citizen’s Party,” of new financial institutions like MUSE (Musicians United for Safe Energy), and the “Voluntary Simplicity” celebration of a dual society of swinging, jeans-clad, high-brow elitists from the middle classes and the conventionally clad, consumer-oriented, low-brow underdogs from the working classes—a dual society generated by the corporate-financed “think tanks” of the Stanford Research Institute.

In all of these cases, the radical implications of a decentralized society based on alternate technologies and closely knit communities are shrewdly placed in the service of a technocratic sensibility, of “managerial radicals,” and opportunistic careerists. The grave danger here lies in the failure of many idealistic individuals to deal with major social issues on their own terms—to recognize the blatant incompatibilities of goals that remain in deep-seated conflict with each other, goals that cannot possibly coexist without delivering the ecology movement to its worst enemies. More often
than not, these enemies are its “leaders” and “founders” who have tried to manipulate it to conform with the very system and ideologies that block any social or ecological reconciliation in the form of an ecological society.

The lure of “influence,” of “mainstream politics,” of “effectiveness” strikingly exemplifies the lack of coherence and consciousness that afflicts the ecology movement today. Affinity groups, direct democracy, and direct action are not likely to be palatable—or, for that matter, even comprehensible—to millions of people who live as soloists in discotheques and singles bars. Tragically, these millions have surrendered their social power, indeed, their very personalities, to politicians and bureaucrats who live in a nexus of obedience and command in which they are normally expected to play subordinate roles. Yet this is precisely the immediate cause of the ecological crisis of our time—a cause that has its historic roots in the market society that engulfs us. To ask powerless people to regain power over their lives is even more important than to add complicated, often incomprehensible, and costly solar collectors to their houses. Until they regain a new sense of power over their lives, until they create their own system of self-management to oppose the present system of hierarchical management, until they develop new ecological values to replace current domineering values—a process which solar collectors, wind machines, and French-intensive gardens can facilitate but never replace—nothing they change in society will yield a new balance with the natural world.

Obviously, powerless people will not eagerly accept affinity groups, direct democracy, and direct action in the normal course of events. That they harbor basic impulses which make them very susceptible to these forms of activities—a fact which always surprises the “managerial radical” in periods of crisis and confrontation—represents a potential that has yet to be fully realized and furnished with intellectual coherence through painstaking education and repeated examples. It was precisely this education and example that certain feminist and anti-nuke groups began to provide. What is so incredibly regressive about the technical thrust and electoral politics of environmental technocrats and “managerial radicals” today is that they recreate in the name of “soft energy paths,” a spurious “decentralization,” and inherently hierarchical party-type structures the worst forms and habits that foster passivity, obedience, and vulnerability to the mass media in the American public. The spectacular politics promoted by Brown, Hayden; Commoner, the Clamshell “founders” like Wasserman and Lovejoy, together with recent huge demonstrations in Washington and New York City breed masses, not citizens—the manipulated objects of mass media whether it is used by Exxon or by the CED (Campaign for Economic Democracy), the Citizen’s Party, and MUSE.

Ecology is being used against an ecological sensibility, ecological forms of organization, and ecological practices to “win” large constituencies, not to educate them. The fear of “isolation,” of “futility,” of “ineffectiveness” yields a new kind of isolation, futility, and ineffective-

An ecologically oriented feminist movement is now emerging and the contours of the libertarian anti-nuke alliances still exist. The fusing of the two together with new movements that are likely to emerge from the varied crises of our times may open one of the most exciting and liberating decades of our century. Neither sexism, ageism, ethnic oppression, the “energy crisis,” corporate power, conventional medicine, bureaucratic manipulation, conscription, militarism, urban devastation, or political centralism can be separated from the ecological issue. All of these issues turn around hierarchy and domination, the root conceptions of a radical social ecology.

It is necessary, I believe, for everyone in the ecology movement to make a crucial decision: will the eighties retain the visionary concept of an ecological future based on a libertarian commitment to decentralization, alternative technology, and a libertarian practice based on affinity groups, direct democracy, and direct action? Or will the decade be marked by a dismal retreat into ideological obscurantism and a “mainstream politics” that acquires “power” and “effectiveness” by following the very “stream” it should seek to divert? Will it pursue fictitious “mass constituencies” by imitating the very forms of mass manipulation, mass media, and mass culture it is committed to oppose? These two directions cannot be reconciled. Our use of “media,” mobilizations, and actions must appeal to mind and to spirit, not to conditioned reflexes and shock tactics that leave no room for reason and humanity. In any case, the choice must be made now, before the ecology movement becomes institutionalized into a mere appendage of the very system whose structure and methods it professes to oppose. It must be made consciously and decisively—or the century itself, not only the decade, will be lost to us forever. □ □

To ask powerless people to regain power over their lives is even more important than to add complicated, often incomprehensible, and costly solar collectors to their houses.
ACCESS EXCESS: A Rain Parody

Warning: what you are about to read is not to be taken seriously! We thought an anniversary issue would be a good place to kid our own style a bit and have some fun with the foibles of friend and foe alike. Don’t try to order any of these “books”—regardless of how worthy we may have made them sound! -JF

Turning Your Solar Collector into an Old Refrigerator, Mother Dirt Blues’ Starry-Eyed Homestead Do-It-Yer-Own-Self Plan No. 3,412, $18.00 plus tax from:
Mother Dirt Blues
P.O. Box 70
Hogheaven, NC 29998

A real practical project for you back-to-the-landers: lets you take a gadget that’s been putting you at the mercy of a big, un dependable, outside power source (i.e., the sun) and convert it into something really useful—a cold storage system for all that food you buy to replace your garden failures.

Recycling: Just a Bunch of Garbage, a Report in the Public Interest from the Multiglobal Container Manufacturers’ Association, 1979, 16 pp., free in any quantity from:
Multiglobal Outreach Division
P.O. Box 130
Landfall, NJ 08949

Did you realize that those sticky, yucky, recyclable containers that must be returned to supermarkets in backward states like Oregon can draw rats, flies, children, and other disgusting pests? Have you ever considered that a recycled soda bottle may have last been used by someone of questionable social or ethnic tendencies? Doesn’t the thought of carrying all those empties from the parking lot to the front of the store just make you tired? Here’s a manual that shows how you and your community can help shake off the meddling of the radical bottle bill fanatics.

The People’s Yellowed Pages, by the No-Bell Co-Operative Network, 1981, 4,395 pp., $6.95 from:
Touchtone Press
Wirecross, WY 89999

Here it is: a thoroughly exhaustive directory of all those flaky groups that either moved away or self-destructed years ago and you didn’t even notice.

Self-Reliance for Reluctant Communities, by the Neighborhood Interlopers’ Citizen Irritation Project, 1979, 473 pp., $12.50 from:
Liberal Fervor Publications
Box 1709
San Francisco, CA 94900

Examines a question that has often perplexed the middle-class community activist determined to build a better world: how to convince poverty-stricken inner-city people that solar collectors can actually be a better long-term investment than food or shelter.

The Ichthys Press
P.O. Box 300
Agua Caliente, NM 87503

In a flowing, almost stream-of-consciousness style, Ms. Flounderfin brings to the surface examples of a movement we at RAIN have been following for the past decade. The Age of Aquariums is indeed beginning to exert its influence on all areas of American life, and Marlin is the first to bring clarity to the turbulent currents of this movement.

Lest the reader be tempted to conclude that her conspiracy can’t hold water, Ms. Flounderfin goes to great lengths to document the rising tide of change coming from the inlets and backwaters of America. The author herself comes with impressive credentials, including membership in the Water-Bearers Institute of Water Hole, MA (one of the best think-tanks in New Wave politics) and a fish flying pin from the YWCA.
Transformational aquaculture is a potent new force today, and *The Aquarium Conspiracy* is on the "must read" list for anyone seriously interested in sounding the depths of this exciting subject.

*Hello to the 50 Gallon Flush*, by Flow F. Reely, 1982, 112 pp., $4.95 from: Dripping Wet Publications Precip Ave. Valsetz, OR 97321

If there was ever a soggy watershed manual flushery, this is it. This masterpiece comes from a place where the plumbing keeps the house afloat. Rumor has it that inhabitants of Valsetz (rainfall 90" plus per year) nestled, and often drenched, in Oregon's Coast Range, struggle to keep their toilets flushing, or suffer moldy rugs and surfable living rooms. Clear, do-it-yourself instructions enable homeowners to adapt most any equipment to the maritime climate.

*From: Dressing for Stress*


A veritable compendium of post-industrial dressing for the upwardly mobile, *Dress for Stress* explains in detail how to find the most expensive buys in ready-to-wear, how to choose jewelry so the dollar value sparkles, and how to be confident and secure in running up an impressive VISA bill. Most important, it encourages you to lift your nose high and be content in the knowledge that your clothes set you apart from troubled times.

*Out of Place: A Bioregional Real Estate Guide For Mobile Americans*, by Plasti C. Roots, 1983 223 pp., $5.95 from: Aloof Press Transient Plaza Nohome, AM 59320

Finally available in print, this book captures that well-established tradition so characteristic to North America—that of going everywhere but being nowhere. As you hop from metropolis to metropolis, you'll be led through that jumble of unconscious real estate agents to the best in every bioregion. This book reveals that many unsoured build-and-move-away sites still can be disinhabited.

*From: Out of Place*


If you're fully centered, aligned, and attuned, you won't need any additional access information for this book. You're already aware.


Taking the eminently reasonable position that "somebody's gotta be in last place," the distinguished, if a bit secretive, Trilaterals conclude that Third World people are just a whole lot happier without the corrupting influence of money or power.

*Obscurantist Decentralist Meanderings: A New Age Political Manifesto*, prepared by the New Green Citizens' Transformational Alliance, 1984, 1,746 pp., $11.95 from: Cutting Fringe Books P.O. Box 20001 Washington, DC 20202

At last, an only-slightly-murky exposition of New Age political thought that cannot help but make a profound impression on the other 98 percent of America's voters. Reagan, watch out!


Examines two of the challenging bioregional issues facing South Africa's white minority leadership: (1) how to help native populations recognize natural watershed boundaries in what may at first appear to be arbitrarily selected barren wastelands; and (2) how to nurture a sense of rootedness and regional pride among tribal groups assigned to areas they never even heard of before.


Useful tips on how to get home electrical consumption high enough to qualify for the cheaper industrial rates; ideas for home hobby projects using an easily built basement aluminum smelter; new kitchen convenience with your own chainsaw butter cutter.
RAINMAKERS: Where Are They Now?

by Ann Borquist

Rainmakers. We're drawn to the old green house on Irving Street because we share a particular set of values, a hopeful vision for the future, and a desire to nurture that vision into maturity. Over the past nine years, dozens of us have joined hearts and typewriters to gather, sift, and share information on the tools and ideas everyone can use to build more self-reliant, just, and ecologically sound communities.

Rainmakers are a visionary bunch though, and sooner or later, a person focuses on a new picture, a new thread that can be woven into the picture to make it stronger and more beautiful. They leave RAIN and walk a different path. On the other hand, some Rainmakers give us so much that they "give out." They leave RAIN to recuperate.

We want to share with you information we've gathered about where some of the Rainmakers are now. What are they doing? How have they woven the RAIN vision into their lives?

Several folks have headed toward service with local or national government. They are bridging the gap between the cutting fringe and the mainstream... Tom Bender and Lane deMoll (editors, 1975-79), moved to Nehalem on the Oregon coast. Tom has been elected to the local water board and is helping his community to match its growth patterns to its resources... Phil Conti (editor, 1978-79) is the guiding force for Southeast Uplift, a neighborhood information and assistance center in southeast Portland... Anne McLaughlin (business manager, 1975-77) interprets zoning regulations to local residents in her work as a city planner for the Portland Planning Bureau. As a member of the Nuclear Weapons Freeze Coalition, she coordinated the logistics for the Euro-missile Rally on October 22nd... Planning the future is the focus of Steve Ames' (editor, 1978-79) work. He has helped hundreds of Portland's civic leaders to create their own vision of the future and move toward it... From a drug education program (for parents as well as their kids) to work with the City Planning Commission, Bruce Borquist (Resource Center staff member, 1982) uses his community organizing skills to help groups in Gladstone, Oregon, identify, plan, and carry out the tasks they set for themselves... Laura Stuchinsky (magazine/Resource Center staffer, 1980-82) now works as a citizen advocate in the Portland office of Congressman Ron Wyden (D-Ore.).

Some former staff members transferred their skills and energy to appropriate technology programs funded by federal or state government... Western SUN, a federally funded renewable energy information center, drew upon the experience of two Rainmakers, Lee Johnson (editor, 1974-78), and Becky Banyas-Koach (magazine promotion manager, 1980). Both lost their positions in 1982 when Western SUN was abolished under Reagan administration cutbacks... Two other Rainmakers, John Ferrell (editor/information specialist, 1979-82; guest editor, 1983), and Gigi Coe (guest editor, 1977; co-editor with Lane deMoll of Stepping Stones in 1978) joined the ranks of the California Office of Appropriate Technology (Cal-OAT). Both lost their positions earlier this year when Cal-OAT was dismantled by the new California governor. Gigi continues to work on a.t.-related issues, e.g., co-authoring a book on home energy for the Sierra Club. She describes her work as having the "same theme" as when she worked with RAIN—"empowering people to take better care of themselves and the world."

Rainmakers face the same challenge as any other teacher/preachers: How can they live lives that reflect the values they espouse?... The goal for Tom Bender...
and Lane deMoll has been “to get involved in the heart of a.t.—to put our preachings into practice in a small town.” In a recent letter, Lane wrote, “We built our sun-tempered house, tend a tiny, wind-swept, slug-ridden garden, use a drum privy (squat style), do our share in our cooperative food buying club, and need to fix our solar water heater.” Tom now has his architecture license and has just designed a solar addition to the Cannon Beach (Oregon) Fire Station as one of his first jobs... Mark Roseland (editor, 1979-82) and three friends are homesteading on 40 acres in southern Oregon. Their small “community” has founded the Matrix Institute, an appropriate technology educational organization. Mark also works part-time as an academic advisor at Rogue Community College. Writing and editing gets into your blood when you work at RAIN; after awhile, you even edit letters from your mother. A number of former Rainmakers do some writing/editing, and a few have chosen to make a (light) living from it. Several national and local publications have asked Carlotta Collette (editor, 1979-82) to write articles for them. Her most recent project was writing an article on St. Paul’s (Minnesota) home-grown economy for In Business magazine. Carlotta also won local acclaim through her work as an on-the-street reporter for “Portland on Line,” a TV talk show covering such controversial current events as the founding of the local chapter of Guardian Angels, and the failure of the Washington Public Power Supply System... Nancy Cosper (Resource Center staffer, 1981-83) continues to write for RAIN. Nancy recently became a Rain Umbrella Board member and is channeling her spirit and energy toward making it an effective advisory group... Did you do a double take when you saw who is editing this issue? Yes sirree!! John Ferrell is back and using his superb writing and editing skills to create the masterpiece you now hold in your hands. He will leave us as soon as we hire a new RAIN editor. Among other things, Steve Ames edited Earthwatch Oregon, the Oregon Environmental Council magazine, for a time after leaving RAIN in 1979... You’ve probably noticed that Tom Bender has kept in touch with RAIN since his departure four years ago, and continues to pour his thoughts through his pen to our readers... Last week, Tanya Kucak (RAIN staff, 1981) dropped by RAIN during her visit to Portland from California. Tanya is an editor for Infoworld, a popular computer magazine based in Palo Alto... Mimi Maduro (guest editor, 1983, and longtime Rain Umbrella Board member) writes computer software and hardware guides that people can understand. She also lends her support and spirit to a “Women in Technology” group here in Portland. The only job that takes more time and energy than being a Rainmaker is being a parent... Both Lane deMoll and Becky Banyas-Koach are currently employed as full-time mothers, with all the overtime hours, stress, and joy that job entails. Lane is also organizing a new school (Fire Mountain Elementary School), and, in her remaining “spare” time, is involved in a local birthing information network. What do Findhorn, the Green Party, and a taverna in Greece have in common with RAIN? Steve Rudman, of course. Steve (Resource Center staffer, 1981-82) spread RAIN posters all over Europe during his year-long trek from June ’82 to June ’83. His time away from home gave him a chance to re-evaluate and re-design his personal goals. He’s now back in Portland, a member of the Rain Umbrella Board, and ready to stir the city to action. We should all approach our work as fine artisans would. Three Rainmakers have made art (in the traditional sense) an integral part of their lives... Pauline Deppen (business/circulation manager, 1979-80) served on the Rain Umbrella Board for a year after leaving the staff. She has become an excellent weaver of silk threads which magically turn into beautiful cloth... Linda Sawaya (graphic design and layout artist/co-editor/officemanager, 1977-79) brings order and beauty to her work as a graphic designer with Oregon Public Broadcasting... Gail Katz (RAIN contributor since 1979) is a mechanical and electrical engineer who also has talents in stage design and construction, auto mechanics, and building construction. There you have it. A complete partial list of how some of our old friends are playing their part in building a world that reflects the vision we’ve been jawing about for the last nine years in RAIN. Let’s not stop here, though. Let us all look forward to the next nine years, and the next nine after that, and plan the part each of us will play to enrich the communities in which we live. □ □

Candidates for the Best/Worst RAIN Article Titles

| Boiling Over in Bean Town (July ’81) | Now (June ’82) |
| Escargot on a Slug Budget (Oct. ’80) | Keeping Tenants Toasty (Feb./Mar. ’80) |
| Go Naked with the Leopard, Carry a Transistor Radio (June ’78) | No Drought About It (Apr. ’77) |
| Involuntary Self-Reliance, or Badtimes from Bonzo (July ’81) | Reach Out, Reach Out and Byte Someone (July ’82) |
| I’ve Look at Codes from Both Sides | Silly President Carter (Apr. ’78) |
| The Third Pig is Always the Fattest: Economies of Furch Piles (May ’77) | What is to Give Light Must Endure Burning (May ’78) |
| What do Findhorn, the Green Party, and a taverna in Greece have in common with RAIN? Steve Rudman, of course. Steve (Resource Center staffer, 1981-82) spread RAIN posters all over Europe during his year-long trek from June ’82 to June ’83. His time away from home gave him a chance to re-evaluate and re-design his personal goals. He’s now back in Portland, a member of the Rain Umbrella Board, and ready to stir the city to action. We should all approach our work as fine artisans would. Three Rainmakers have made art (in the traditional sense) an integral part of their lives... Pauline Deppen (business/circulation manager, 1979-80) served on the Rain Umbrella Board for a year after leaving the staff. She has become an excellent weaver of silk threads which magically turn into beautiful cloth... Linda Sawaya (graphic design and layout artist/co-editor/officemanager, 1977-79) brings order and beauty to her work as a graphic designer with Oregon Public Broadcasting... Gail Katz (RAIN contributor since 1979) is a mechanical and electrical engineer who also has talents in stage design and construction, auto mechanics, and building construction. There you have it. A complete partial list of how some of our old friends are playing their part in building a world that reflects the vision we’ve been jawing about for the last nine years in RAIN. Let’s not stop here, though. Let us all look forward to the next nine years, and the next nine after that, and plan the part each of us will play to enrich the communities in which we live. □ □

Candidates for the Best/Worst RAIN Article Titles

| Boiling Over in Bean Town (July ’81) | Now (June ’82) |
| Escargot on a Slug Budget (Oct. ’80) | Keeping Tenants Toasty (Feb./Mar. ’80) |
| Go Naked with the Leopard, Carry a Transistor Radio (June ’78) | No Drought About It (Apr. ’77) |
| Involuntary Self-Reliance, or Badtimes from Bonzo (July ’81) | Reach Out, Reach Out and Byte Someone (July ’82) |
| I’ve Look at Codes from Both Sides | Silly President Carter (Apr. ’78) |
| The Third Pig is Always the Fattest: Economies of Furch Piles (May ’77) | What is to Give Light Must Endure Burning (May ’78) |
| What do Findhorn, the Green Party, and a taverna in Greece have in common with RAIN? Steve Rudman, of course. Steve (Resource Center staffer, 1981-82) spread RAIN posters all over Europe during his year-long trek from June ’82 to June ’83. His time away from home gave him a chance to re-evaluate and re-design his personal goals. He’s now back in Portland, a member of the Rain Umbrella Board, and ready to stir the city to action. We should all approach our work as fine artisans would. Three Rainmakers have made art (in the traditional sense) an integral part of their lives... Pauline Deppen (business/circulation manager, 1979-80) served on the Rain Umbrella Board for a year after leaving the staff. She has become an excellent weaver of silk threads which magically turn into beautiful cloth... Linda Sawaya (graphic design and layout artist/co-editor/officemanager, 1977-79) brings order and beauty to her work as a graphic designer with Oregon Public Broadcasting... Gail Katz (RAIN contributor since 1979) is a mechanical and electrical engineer who also has talents in stage design and construction, auto mechanics, and building construction. There you have it. A complete partial list of how some of our old friends are playing their part in building a world that reflects the vision we’ve been jawing about for the last nine years in RAIN. Let’s not stop here, though. Let us all look forward to the next nine years, and the next nine after that, and plan the part each of us will play to enrich the communities in which we live. □ □

Candidates for the Best/Worst RAIN Article Titles

| Boiling Over in Bean Town (July ’81) | Now (June ’82) |
| Escargot on a Slug Budget (Oct. ’80) | Keeping Tenants Toasty (Feb./Mar. ’80) |
| Go Naked with the Leopard, Carry a Transistor Radio (June ’78) | No Drought About It (Apr. ’77) |
| Involuntary Self-Reliance, or Badtimes from Bonzo (July ’81) | Reach Out, Reach Out and Byte Someone (July ’82) |
| I’ve Look at Codes from Both Sides | Silly President Carter (Apr. ’78) |
Community
Increased communication between cultures through both electronic (computers, video, etc.) and human contact. —Kris Nelson (Resource Center staff, 1982-)
Global communications of unprecedented scale, leading to increased worldwide cooperation, yet among smaller units. —J. Steinke
Coalitions will become more important, building lines of communication across issues, race, sex, etc.
—L. Stuchinsky

Living
Compact, space-efficient cottages ... more interesting, denser neighborhoods ... intensive gardens and mini-orchards replacing suburban lawns ... redivision of lots and structures to accommodate a wide variety of family/living group sizes ... a new generation of user-friendly public buildings ... owner-finished shells ... greater architectural variations from region to region. —Dave Deppen (RAIN contributor since 1975)
Communities will become more important as people recognize their potential power, self-reliance, and support. —Ann Borquist (Resource Center staff, 1982-)
More people will be “living lightly.” —D. Stotler

Governance and Power
Greater reliance on local solutions through local governments. Radically different local governments based on high citizen involvement, mediation rather than provision, and corporation-style management. —Bruce Borquist (Resource Center staff, 1982)
Uprising of the world’s professionals (those who use collaborative reasoning) and a downfall of politicians (those who use combative reasoning). —Phil Henshaw (RAIN contributor since 1977)
From striving for power to personal satisfaction. —Jeff Strang (Resource Center staff, 1983-)
The “I’ve got mine” crowd is in charge, and I believe they will stay in charge until the end of this century. —Gigi Coe (Stepping Stones co-editor, 1978)

Energy
More energy conservation and solar construction.
—J. Strang
Shift from heavy industry to more energy efficient and intelligent (information-rich) products. Pervasive application of the conservation model. —K. Nelson

Economics
We need to maximize the commercial potential of the ideas and inventions that we know are superior to what is all around us now. —Dan Knapp (RAIN contributor since 1977)
Barring nuclear war, the U.S. will likely grow bigger, better, and wealthier. —A. Borquist
Further globalization of the economy before a noticeable trend toward localization. —K. Nelson

Trend toward more leisure time and less income. More human-oriented workplaces and businesses. Resolution of labor/management dichotomy into more cooperative systems on a wide scale. —J. Strang

Consciousness
There is a steadily increasing awareness of the holiness of the earth, the need for an understanding of the cyclical nature of things. —Lane deMoll (editor, 1975-79)

Increasing awareness of ourselves as parts of a whole; good physical, mental, and spiritual health; the fragility of the planet; the need for cooperation; the no-win situation with nuclear power and weapons. —Becky Banyas-Koach (magazine staff, 1980)

Toward greater attention: to the environment, to space, to the plight of the Palauans, to the Soviets, to our backyards, to ourselves. —J. Strang

Deepening spiritual basis for political and secular action, including environmental causes. —K. Nelson

The biology of life will become the dominant metaphor as more people become aware of the web which sustains all of life. —J. Steinke

International
Further adoption of appropriate technologies by the Third World, lessening dependence on developed countries. —K. Nelson

Population pressures leading to increased water shortages, soil erosion, food shortages, and fuel shortages in the Third World—all of which will increase revolutionary fervor. —John Ferrell (editor, 1979-82)

The form of national sovereignty in an interdependent world will be a big question for the future. —B. Borquist

Hopefully, the U.S., the U.S.S.R., and China will learn to coexist as their empires decline and as the world becomes more balanced and cooperative. —J. Steinke

Potential for major starvation and overpopulation. —A. Borquist

Governments will work more at solving local problems rather than trying to influence the international scene. —J. Strang

Technology
Appropriate technology must be moved aggressively into the marketplace through various and sundry businesses, most of which have not even been invented yet. —D. Knapp

Communications technology and gadgetries galore. —Mimi Maduro (Rain Umbrella Board, 1981-)

In an information-based economy, where data is moved electronically and more work is done in the home, excessive work-related transportation will look very costly, redundant, even silly. The communications society analog to the Model A Ford will most likely be the Apple computer—not the Volkswagen Rabbit! —Steven Ames (editor, 1978-79)

My fear is that we will go on our merry way developing newer and ever better gadgets while the rest of the world suffers. —A. Borquist

Society
Widening literary and “informed” gap between developed and underdeveloped countries, the rural and urban, the poor and the rich. Deeper cross-fertilization of social movements. —K. Nelson

Different factions of “the movement” are seeking common ground. —Steve Rudman (Resource Center staff, 1980-82; present Umbrella Board member)

An older society with the youth of the sixties in positions of power. A return to the celebration of what is good and true in life. —A. Borquist

Increased struggle between technology and human values. An aging society. The high-tech revolution will have produced a new “proletariat” of low, menial wage earners and an even more disparate personal wealth base. —B. Borquist

Agriculture
Increase in very small farms, loss of the mid-sized family farm, and increase in large farms. —L. Stuchinsky

Peace and War
A world in which people have learned to care for each other enough to not want to destroy. —B. Banyas-Koach

Substantial arms reductions are highly unlikely in a near term time frame. Great potential for either side to touch off "space wars" using satellites, lasers, etc. —J. Ferrell

Fewer nukes; more chemical and biological warfare items. —J. Strang

Continuation of military and nuclear weapons development. —L. Stuchinsky

Maybe some good things will happen, too. —J. Ferrell

2000 A.D. HOUSE:
It’s solar, superinsulated, and super-efficient in its use of space, but the look and feel is cozy and friendly.

Dave Deppen
Rainmakers, almost without exception, are lovers of books. Those on the staff at any one time must scramble to keep up with the latest and best literature that falls into RAIN's wide range of interests. Those who eventually leave the staff scramble just as hard to catch up on their personal reading interests—which are often as eclectic as RAIN's.

Nineteen present and former Rainmakers have provided us with lists of the books that have most influenced their lives over the past decade. At first glance, these lists convey a sense of pure intellectual anarchy (certainly a Rainmaker trait at times!), but a closer look does reveal some patterns. RAIN people are strongly influenced by the energy/a.t./environmental classics that one might expect, but a fair number of lists also reveal a deep concern with spiritual values, both Eastern and Western. There does not, however, seem to be any corresponding taste for so-called "New Age" books; only Marilyn Ferguson's *Aquarian Conspiracy* receives more than a single mention in that category. And, perhaps significantly, a number of Rainmakers take care to emphasize that in spite of their love of books, their thoughts and actions in recent years have responded more to such factors as personal intuition and the influence of friends.

Of the two most frequently mentioned books, one is certainly no surprise: E. F. Schumacher's *Small is Beautiful* was published the year before RAIN began, and Lane deMoll (RAIN editor, 1975-79) recalls how exciting it was to find a book that "put all our rambling thoughts into a workable framework." The other often-mentioned favorite, Robert Pirsig's *Zen and the Art of Motorcycle Maintenance*, is something of a surprise since it was never reviewed in RAIN. None of the Rainmakers who cite this unusual novel about one man's quest for the meaning of "quality" give their reasons for doing so, but perhaps a clue can be found in a letter we published in our August/September 1981 issue. RAIN reader Drummond Read was surprised to find no mention of Zen in RAINBOOK, since he believed there was "no work of literature anywhere more relevant to the underlying set of values which makes appropriate technology appropriate." Read believed the Pirsig book must have "played its part somewhere in the history of RAIN; its mark is all over everything."

The only other individual works listed by several Rainmakers are the Club of Rome's 1974 report, *Limits to Growth*, and the *Whole Earth Catalogs* (along with *Co-Evolution Quarterly*). Regarding the Catalogs and Co-Eo, Lane deMoll comments that editor Stewart Brand has, over the years, "consistently pulled together mind-boggling ideas that open up new worlds."

Books by architect Christopher Alexander (described in RAIN, Aug./Sept. 1980 and May 1982) receive high praise from three Rainmakers. Dave Deppen (RAIN contributor since 1975) favors all of the well-known Alexander works: *A Pattern Language*, *The Oregon Experiment*, *The Linz Cafe*, and *A Timeless Way of Building*. He describes the last named as a "powerful, heartfelt study of what makes good buildings and cities." Carlotta

Spiritually oriented books from a wide range of spiritual traditions appear on Rainmaker lists. Becky Banyas-Koach (RAIN staff, 1980) likes *Zen Mind, Beginner’s Mind* by Shunryu Suzuki. John Steinke (Rain Umbrella Board, 1981-82) names *Creativity and Taoism* by Chang Chung-Yuan and calls *Tao, Watercourse Way* by Alan Watts “probably the most concise definition of what RAIN is about in the spiritual realm, because of its perspective on human beings as part of their environment.” The *Bible* is listed by two Rainmakers and *Mere Christianity* by C. S. Lewis is a favorite of three. Of the latter, Ann Borquist (Resource Center staff, 1982-) says, “It was a major influence in my recognizing Christianity as a life-giving, life-shaping faith, contrary to what I saw in many churches.”

Beyond those general trends, the lists show that Rainmakers are likely to be interested in almost anything: science fiction, Chinese history, nutrition, feminism, astronomy, economics, psychology, and more. Among the few additional titles that appear on more than one list: RAINBOOK (of course), *Helping Ourselves* by Bruce Stokes, *Food First* by Frances Moore Lappé and Joseph Collins, *The Worldly Philosophers* by Robert Heilbroner, *Energy for Survival* by Wilson Clark, *The Twenty-Ninth Day* by Lester R. Brown, *Our Bodies, Ourselves* by the Boston Women’s Health Book Collective, and *Nature, Man, and Woman* by Alan Watts.

But Rainmakers respond to good ideas and good information wherever they find them, and a number of our respondents believe that influences other than books have had a more direct impact on their thoughts and actions over the past decade. Carlotta Collette, a voracious reader, admits there are several a.t. movement classics she has never read: their ideas simply filtered into her consciousness during years of involvement with other activists in community self-reliance projects. Phil Henshaw (RAIN contributor since 1977) recalls how he was influenced in recent years “by a raft of publications, essays, conversations, radio stations, the dreams of a handful of teachers and intimate friends, and a lot of raw data on trends and structures of change. There was a long list of books, too, but most were after the fact, confirmations rather than new directions.” Ann Borquist also points to the influence of people, “some famous, some just special in a smaller circle of friends,” and says further, “My consciousness of social justice, simple living, community building, self-help, and so forth is not something I’ve studied so much as felt and understood by experience; I’m more in touch with the spirit of the movement than the text.”

The scenarios of some futurists suggest a diminishing role for books in the coming decades; television and ever-expanding computer applications are seen as fulfilling a greater share of people’s information needs. Perhaps so, but the Rainmakers would seem to be heading toward a more balanced and humane information future. This does not mean a rejection of the electronic revolution—some Rainmakers, in fact, have focused their attention on creating socially beneficial applications for computer and cable television technologies. But RAIN people also recognize that the best new information and the most mind-boggling new ideas will always derive in large part from some enduring traditions: exposure to good books, conversation with wise friends, and faith in one’s own intuition.

### Periodicals That Have Bit the Dust

<table>
<thead>
<tr>
<th>Periodicals That Have Bit the Dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applewood Journal</td>
</tr>
<tr>
<td>A.T. Times</td>
</tr>
<tr>
<td>Edcentric</td>
</tr>
<tr>
<td>The Elements</td>
</tr>
<tr>
<td>Futures Conditional</td>
</tr>
<tr>
<td>Natural Life</td>
</tr>
<tr>
<td>New Roots</td>
</tr>
<tr>
<td>Observations from the Treadmill</td>
</tr>
<tr>
<td>Science in the Neighborhood</td>
</tr>
<tr>
<td>Self-Reliance</td>
</tr>
<tr>
<td>Seriatim</td>
</tr>
<tr>
<td>Seven Days</td>
</tr>
<tr>
<td>Solar Washington</td>
</tr>
<tr>
<td>Teacher Works</td>
</tr>
<tr>
<td>The Wastebin</td>
</tr>
</tbody>
</table>
What do a “Blower Door,” a beam trawl shrimp netting device, and a laundry water recycling system have in common? All represent innovative ways to cut fossil fuel costs, and all have been developed with funding from the U.S. Department of Energy’s (USDOE) Appropriate Technology Small Grants Program.

This is the fourth in a series of five articles describing projects funded under the USDOE program in Oregon. Here we focus on projects that illustrate a wide range of energy conservation strategies.

Closing the Door on Energy Leaks

Rising utility bills have stimulated many people to “tighten up” their houses. But often, homeowners are not aware of how much heat is pouring into and out of the house through baseboard seams, wall plug outlets, door jams, heat ducts, and so on.

With the aid of a grant from the U.S. Department of Energy, the folks at Central Oregon Renewable Resources (CORR) used an eye-catching new concept—House Doctoring—and an interesting piece of equipment—the Blower Door—to stimulate the public imagination and improve the energy efficiency of 50 homes in the Bend, Redmond, Prineville, Sisters, and LaPine areas.

CORR’s goal was to reduce the energy required for space heating 15 to 20 percent by sealing leaks, using low- and no-cost measures as much as possible. The leaks often cannot be seen by the usual methods of performing an energy analysis on a house. In order to locate leaks, the House Doctors used the Blower Door, an instrument that fits in a door of a house and includes a large fan and air pressure measurement devices (see photo). The fan pressurizes and depressurizes a house, and, when used with smokesticks or an infrared scanner, is an excellent diagnostic tool for locating hidden air leaks. The measurement instruments on the door enable the House Doctors to estimate the air infiltration rate in a house. House Doctors then seal leaks with the appropriate material (e.g., weatherstripping, foam gaskets, caulking).

House Doctors identified leaks in three major areas: 1) the outside building envelope, allowing cold air to creep in and hot air to rush out; 2) attic bypass routes, permitting heated air to slip around and through attic insulation; and 3) leaky ductwork, allowing warm air to heat unused areas. Typical sources of leaks included the fireplace, plumbing penetrations of the wall and floor,
wall plug outlets, fan fixtures, doorways, and the laundry chute. One house visited was a conservation specialist's gold mine. This was a 40-year-old, 1300-square-foot house with a half-basement and a rubble rock foundation. It had an electric forced-air heating system, a little-used fireplace with glass doors, and a remodeled bathroom. On first glance, the house seemed to have a few leaks, but when the Blower Door was installed, the House Doctors discovered a very high rate of outdoor/indoor air exchange, meaning that there were some large holes somewhere.

Upon closer examination, and with the help of smoke-sticks, they located the major problem areas. Smoke was disappearing quickly around the cedar-trimmed bathtub and the French doors, and was being sucked up the chimney around the glass doors on the fireplace; daylight was visible through cracks in the foundation; and an eight-inch heating duct was not hooked up to anything, so it was warming the crawl space under the house. To remedy these problems, the House Doctors sealed holes with insulation, caulked and weather-stripped all the doors, including the French doors and fireplace doors, patched the foundation mortar, and sealed the mystery duct under the house. After these changes, the Blower Door test showed a 39 percent reduction in heat loss.

Thirty-four of the 50 houses doctored had pre- and post-doctoring examinations. They showed an average heat loss reduction of 25 percent (saving 2,220 kWh/yr.) and an annual savings of over $122 (at 5¢ per kWh). This means that with the present cost of energy in CORR's service area, the payback period for a House Doctor visit is about three and a half years.

As good physicians, CORR's House Doctors also prescribed lifestyle changes to head off future ailments. They emphasized to homeowners how simple changes in daily habits could further enhance energy savings.

CORR's program was very effective for the 50 households that participated; however, the CORR staff did not reach one of their goals. They had hoped to train homeowners and renters to seal leaks themselves, but despite announcements, phone calls, and mailings, only one organization expressed an interest in cosponsoring the House Doctor workshops. This lack of public interest was discouraging to CORR personnel; in retrospect, it seems likely to them that scheduling the program in the fall, rather than the spring, and a more ambitious advertising campaign might have produced more positive results.

The biggest obstacle to the spread of House Doctoring programs throughout the country is a fear about possible reduction of air quality in homes. When all the holes in a house are plugged, harmful indoor air pollutants have no means of escape and fresh air has no way to enter. However, the Blower Door makes it possible to ensure that no house is tightened beyond a safe air quality standard. Also, an air-to-air heat exchanger (see discussion of Alan Boner's heat exchanger project below) provides a solution to the problem by circulating and exchanging indoor and outdoor air.

When researchers at the Bonneville Power Administration complete their studies of indoor air pollutants and set safety guidelines for "tightening" a house, the House Doctor program and the Blower Door may become part of standard conservation education programs. In fact, the Blower Door may become a household word soon. (Mike McKeever, Conservation Management Services, 1012 NW Wall, Suite 203, Bend, OR 97701.)

Low-Cost Residential Heat Exchanger

Heating your home has become ever more expensive in recent years. Many people have responded to this "utility bill crisis" by insulating and weatherizing their houses. But increased energy efficiency has led to a whole new range of problems, especially in modern, air-tight buildings. For example, indoor air pollutants can increase to harmful levels when airflow into and out of a house is reduced severely. Also, accumulated moisture from showers and cooking can contribute to accelerated wood decay, a homeowner's nightmare.

Air-to-air heat exchangers deal with the problem of ventilation by increasing the indoor/outdoor air exchange. At the same time, they draw excess moisture from indoor air and channel it down a drain. More important, indoor heat is transferred to incoming air, resulting in decreased energy bills. Alan Boner of Eugene developed a low-cost, easily-installed heat exchanger that attaches to a clothes dryer and recovers heat from the dryer exhaust.

Picture a heat exchanger as a long, thin box with a thin membrane dividing it in half lengthwise, forming two parallel flow paths (see diagram). The membrane acts as a thermal conductor between the two opposite-flowing air paths. So, hot, stale air entering at one end releases its heat via the membrane to the colder, fresh air entering through the opposite end. Fans assure a smooth airflow. In short, a heat exchanger continuously warms fresh incoming air using the warm, stale, exiting air, thus reducing home heating costs.

Alan Boner's design is a 7-foot long, 3-inch by 12-inch box containing several narrow airflow passages, with a supplementary fan attached. The box is placed flat against the wall behind the clothes dryer.

In 1981, Boner received a U.S. Department of Energy grant to purchase measuring and testing equipment for his prototype. He monitored intake, exhaust, airflow, and pressure level variations between the two sides of the exchanger, and then modified the design to increase its efficiency. For example, the first design looked like a
long, thin air path folded over on itself. It caused so much restriction that the pressure dropped dramatically, making the fan work harder to move the air. To remedy this, he went from one single-folded airflow path to several narrow, straight paths (see diagram). He also used the monitoring data to develop operating standards under a variety of conditions.

Test results have been encouraging. Boner’s device recovers 63 percent of the energy exhausted by the clothes dryer. His goal is to reach 70 percent recovery. Warm air from the exchanger is used to heat the living area, or it can be recycled back into the dryer. Initially, Boner was concerned about condensation in the airflow paths, but it has not been a problem with his design. Another concern with the original design was lint build-up in narrow passages that can block airflow. The addition of an air filter and the one-half inch spacing of the airflow paths have eliminated that problem. Testing also revealed that galvanized steel is just as effective as the aluminum used in his first prototype, and it is also less environmentally damaging.

The Boner heat exchanger has commercial as well as residential applications. Two dormitories at the University of Oregon in Eugene are using the device. Boner calculates that with an annual savings of $230, the payback period for his heat exchanger is about four years. His goal now is to market his design to industrial laundries (such as hospitals, motels, Army bases, etc.) and to clothes dryer manufacturers interested in designing energy-efficient machines that incorporate his ideas.

Boner has designed a cost-effective, energy-efficient product with a relatively short payback period, but, as is often the case with new energy conservation technologies, consumer education will be an important prerequisite to successful marketing. With an effective education and marketing strategy, we may soon see Boner’s invention at local department stores. (Alan Boner, 449 Willamette St., Eugene, OR 97401).

Recycling Laundry Wash Water

The laundry facility of an average-sized motel flushes over one hundred dollars worth of hot water down the drain every day. Considering the number of motels, hospitals, and laundromats currently in operation, we are wasting a tremendous amount of energy, water, and chemicals daily.

Kleen Wash of Salem received a U.S. Department of Energy grant to design a system that would capture hot waste water from commercial or industrial laundries for reuse. The Kleen Wash system allows a user to reduce energy, water, soap and detergent, and sewage costs. Since the cost of sewage is generally more than three times the cost of the water, the Kleen Wash system nets savings by reducing the amount of waste water requiring treatment at a sewage treatment plant.

The first version of the Kleen Wash design captured used wash water, filtered it, added the necessary chemicals, and channeled the water back into the next wash cycle. Tests of that system revealed that it was not cost-effective, so Kleen Wash went back to the drawing board and came up with a modified design.

The modified version the company is currently marketing for 350-700 lb. maximum-capacity machines retrieves the hot rinse water (instead of wash water) and channels it back into the wash cycle. In June 1982, the Kleen Wash system was installed in the commercial laundry that serves the needs of Portland area Thunderbird/Red Lion Inns. Tests have shown an average savings of 52 percent on energy, water, and sewage costs, and 30 percent on chemical costs (about $2,000/mo.). Kleen Wash’s “economy model” for small laundries using machines with a maximum 75 lb. capacity results in a 25 percent average savings on utility costs.

The Kleen Wash system includes an automatic monitor of conductivity and pH. Conductivity refers to the amount of organic matter in the water, and is used to determine the quantity of chemicals that should be added before the rinse water can be reused for the wash cycle. The pH measures how acidic or basic the water is, and indicates what kind of chemicals should be added so that laundered cloth contacting the skin will not cause irritation. This is especially important for nursing homes and hospitals where high or low pH can cause bed sores. After the monitor tests the water, it adds the exact type and quantity of chemical to the water to get clean clothes and a balanced pH.

“The system can be applied to any laundry,” says Ron Brittsan, Kleen Wash manager, “and the payback period is relatively short since it is so cost-effective.” The only disappointing thing about the Kleen Wash design is that it can’t be modified for residential use because the initial capital outlay is high.

The system has been so successful that three motels and two nursing homes on the West Coast are using it. Brittsan says that there is already interest in marketing the design internationally. (Kleen Wash Systems, Inc., 3740 Brooklake Road N.E., Salem, OR 97303.)

Energy-Efficient Beam Trawl for Fishing Industry

The fishing industry has been especially hard-hit by rising fuel costs. In 1981, Paul Smith of Yaquina Boat Works in Toledo, Oregon, received a U.S. Department of Energy grant to develop a light-weight, energy-conserving beam trawl (shrimp netting device). The 1600-lb. otter door trawl currently used by commercial shrimpers has some disadvantages that were easier to
overlook during the era of cheap energy. Bottom friction (large and unwieldy doors often get caught up in the shrimp nets or hung up on the ocean floor) and drag from the considerable weight and size of the doors can add up to a hefty fuel bill.

Smith's beam trawl is designed to do the same job as the otter doors, but in a way that is more energy- and cost-efficient. His first design was a 45-foot beam with two 13-foot movable staffs attached to each end. The staffs can spread the net open to twice the height reached by the 6-foot-high doors. Although it performed well, getting the beam on and off the boat was a problem because the open net caused resistance in the water, and the long beam was unwieldy.

An alternative design was a "box" beam that could be "folded" in the middle, reducing net resistance and making the beam easier to handle. Unfortunately, this one was also too big and bulky.

The third time around, Smith designed a sliding beam that does not have the problems of the first two. The net is attached to a staff permanently secured to one end of the beam. The staff on the other end is connected to the beam by a collar with a spring-loaded catch (see diagram). When the catch is released, the collar slides along the beam, like a ring on a finger, bringing the two staffs together and collapsing the net. The shrimper then lifts the net with a hook and hauls the beam on board where it is stored standing upright.

The sliding beam has several advantages over the conventional otter doors. First, it costs about half as much as the doors. Second, because of its reduced size and weight (200-lb. beam vs. 1600-lb. doors), it causes less drag and therefore cuts fuel costs by 25 to 30 percent (saving about $7500/yr. on an average boat). Third, the beam doesn't require a traditional net designed to open in the water since the staffs keep the net open. Consequently, a "sack" net is sufficient, and it costs less to purchase and repair. Fourth, a 45-foot beam has a 45-foot net that opens to its full width of 45 feet. In contrast, a set of otter doors with a 90-foot net gets a maximum net spread of 45 feet. Fifth, the beam requires fewer floats to keep the net open since the beam is doing most of the work. Finally, the beam can be easily stored on the boat. It is lighter, and, because it is stored upright, it leaves more deck space for storage of gear and shrimp.

The challenge at this point is to convince shrimpers that it is worth their while to switch to the beam trawl; it means scrapping the effective, but costly, otter doors and learning about an unfamiliar technology. In order to demonstrate the safety and technique of handling the beam on an average-sized (65- to 90-foot) boat, a leading shrimper ocean-tested the beam against his otter doors with their 90-foot net. He set up the beam on one side of the boat and the otter doors on the other. The results? The beam caught the same amount of shrimp as the door but caused much less drag; however, it was still a bit difficult to handle out of water.

Such positive results suggest that commercial application of the design should follow naturally. However, as previously noted, Smith has found that shrimpers are reluctant to make the switch from otter doors to the beam trawl—an example of proven tradition winning out over promising innovation. Yaquina Boat Works continues to use the beam on one of its boats, but Smith realizes it will be a long time before his local and international colleagues will consider a switch. He plans to keep testing and modifying the beam so that it can be easily used on the larger boats.

The beam trawl has been used in the Gulf of Mexico and is easily adapted to net fishing anywhere in the world; it offers both economic incentives and conservation benefits to fishing operations. With continued demonstration and testing, the beam trawl is bound to catch on in time. (Paul Smith, Yaquina Boat Works, Inc., 508 Butler Bridge Rd., Toledo, OR 97391.)
Weaving Networks in the 1970s
by Steve Johnson

From the vantage point of the 1980s, the 1960s may seem like an anomaly, a time when political action took center stage. It was cool, and even mandatory, to be politically active, hopeful, mad, and idealistic. Critical to the psychic sustenance of the thousands of isolated individuals going through fundamental consciousness-changing were the events: the civil rights and anti-war demonstrations, as well as the complementary but more anarchistic rock concerts, such as Woodstock.

The popular media decided shortly after the Kent State killings that the sixties had died—that the thousands of rebellious youth had cut their hair and settled into mainstream life.

But from this vantage point, the sixties can also be seen as a mere warming up for the seventies, when the activists, told to "put up or shut up," did just that by creating new models for the kind of improved society that had seemed possible in the sixties. It was, after all, the seventies and not the sixties that spawned the countless new cooperatives and public interest organizations, and it was the seventies when the young (but aging) veterans of the demonstration era settled down to the kind of work they hoped would lead to a socially just and habitable planet.

Key to the seventies were the conferences and other hybrid events that became a way for isolated individuals and groups to meet one another, share ideas, and form connections between each other based on common interests. The connections eventually became known as "networks," and the art of forming the connections came to be called "networking."

By the mid-seventies, conferences and events had become an end in themselves, with relatively sophisticated techniques developed to increase the potential networking. These techniques included production of people-to-people directories, assimilation of countless mailing lists, and even creation of special networking job roles.

The Pacific Northwest, blessed
with a manageable number of people and a distinct geographic area, became a hotbed for these new events and conferences. Astounding numbers of people showed up at events such as the Northwest Conference on Alternative Agriculture held in Ellensburg, Washington (800), and the Bend in the River Conference held in Bend, Oregon (600).

Such events still play an important role in bringing people together and keeping the flow of ideas alive, but those first gatherings were unique. Bend in the River, for example, held on the small Central Oregon Community College campus, was one of the first opportunities for activists, who had gone their separate ways, to come back together to talk about what they did on their "summer vacation." They found out that indeed the sixties had not died—sixties people had simply gone back to their homes and sent proposals to their respective homes and sent proposals to Mark Musick at the Evergreen State College. He copied the proposals and distributed them. I wrote a proposal for locating computers in seven cities that would be linked together. Bob and Laura suggested having a major database that would be linked by terminals in city libraries. That idea won out, but there wasn't anyone to do it.

Instead, Laura became involved with the Environmental Education Center at Portland State University, Steve and Lee started RAIN with others, Robert started the Northwest Regional Foundation in Spokane, Mark helped start Tilth, and I started the Cascadian Regional Library.

**OAT and A.T. in Transition**

*by Sam Sadler*

The foundation of OAT (the Lane County Office of Appropriate Technology, later transformed into Oregon Appropriate Technology, Inc.) was one of those turning points in the evolution of a.t. in the Pacific Northwest. At the time (1977), the obscure notion of assessing technology from a values point of view was finally beginning to make sense to a sizable number of people. Since then, as Sam Sadler points out in this brief history, the term "appropriate technology" has lost much of its punch—but still, both the term and the Eugene-based OAT organization have played a vital role in bringing technological issues into a political framework.—SJ

The Lane County Office of Appropriate Technology was the seed for Oregon Appropriate Technology, Inc. (OAT). Lane County OAT was one of the first county-level a.t. offices in the country. It was created at the recommendation of County Commissioner Jerry Rust, but it was cut after the first year as the swing vote on the Board of Commissioners became more conservative. OAT was re-formed as a cooperative corporation in late 1978 by several of the people who had been on staff at Lane County OAT.

At Lane County OAT, there had been almost as many separate projects as there were staff members. We conducted projects in solar water heating, solar greenhouse demonstration, composting, metals recovery at a solid waste transfer site, composting toilets, greywater systems, farmers' markets, and small farm viability; and we prepared the County's testimony on early versions of the regional power bill. We also produced several publications and maintained a lending library. While it was possible in 1977 and 1978 to be current in these fields and meet the requests for information from the public, it was not possible to maintain that diversity in a small, for-profit business. That was for two reasons. First, we had been providing information to the public without charging a fee. To operate a business, we had to specialize in areas in which people or agencies were willing to purchase a product or service. Given our strengths, those areas were passive solar design and construction for private clients, and research, planning, and publications for government agencies. Second, the technologies were evolving and becoming more sophisticated. To keep on top of them, we had to specialize. Most of our consulting work is solar related, although there is some work in wind and micro-hydro.
We have retained some breadth through administration of the U.S. Department of Energy A.T. Small Grants Program for the Oregon Department of Energy. We have shared the work on that with RAIN.

People seldom speak of alternative technologies anymore; they usually refer to renewable technologies, or they speak of a particular technology. And the term appropriate technology seems anachronistic (with due respect to OAT’s corporate handle) now that the technologies and the way of thinking that once was almost a movement have become more broadly accepted. However, it’s still good to have something like RAIN to remind us of where we came from and that there is a connection that transcends the individual technologies.

Sam Sadler was, until recently, director of Oregon Appropriate Technology, Inc., in Eugene, Oregon. He is now an energy conservation specialist at the Oregon Department of Energy in Salem, Oregon.

Environmental Activism in the Northwest

an interview with Don Waggoner of the Oregon Environmental Council

The Oregon Environmental Council will probably, someday hence (say, fifty years from now), be the subject of a doctoral dissertation as a model public interest group. For it will probably only be after quite a long time (at least in the obscure dens of the academy) that people will realize that such groups were the foundation of a new form of democracy. They will look into the past to learn how centralized democracy (the Washington, D.C., model) was transformed into a decentralized, bioregionally based democracy. From that perspective, it will be difficult to realize just how much of a struggle it was to form and maintain a coalition of interested citizens when such coalitions were mostly considered as gadfly nuisances. In this brief interview, Don Waggoner talks about the early days of the Oregon Environmental Council.—SJ

RAIN: Both Oregon and Washington had chapters of national environmental organizations before the Oregon Environmental Council was formed. How was the establishment of the OEC a new kind of organizing?

WAGGONER: In 1968, a statewide initiative came forth that would have made sure the beaches continued to have public access. That went to a statewide vote and failed. After they had failed, the environmental groups said one of the reasons we did so on the statewide vote was the various environmental groups hadn’t worked together. At the same time, Brock Evans, who was regional coordinator for the Sierra Club, had already begun to establish a group similar to the OEC in Washington state. This became the Washington Environmental Council. He and Maradel Gayle and Larry Williams were the people who brought together the initial interest in the OEC. Maradel became the first president of the OEC in 1969 and volunteered full-time as a lobbyist in Salem during that year’s legislative session.

RAIN: What was the OEC’s original purpose?

WAGGONER: It was not to be a single-interest organization. Its purpose was to bring together the historical and multi-interest groups—the Audubon Society, the Sierra Club, and other national and international organizations. These groups, through their local chapters, signed up with the OEC in this coalition building effort, to make sure a wide variety of issues got heard.

RAIN: As a coalition, what did the OEC undertake?

WAGGONER: There was the first shot at the Bottle Bill, energy issues— influencing the Energy Facility Siting Council (Trojan Nuclear Power Plant) and the state energy policy which started the state Department of Energy—wildlife concerns, land use, wilderness protection, and beach access. In 1969, we were involved in stopping the transportation of nerve gas through Oregon. It was the concern of those who had diverse interests to build coalitions on whatever might come up at any given time. It operated strictly on a volunteer basis; if a certain person cared about a particular issue, they would just go for it. We had a rather large number of groups that were very knowledgeable. All they had to do was start working under the banner of the OEC.

RAIN: After these years of experience and struggle, what would you point to as a lesson for the eighties?

WAGGONER: You have to have a wide degree of support, and it’s not enough to have dedicated volunteers. There must be a number of people in elected office who share the concern for the environmental ethic. This includes people who are appointed—witness James Watt. The reason we were successful in the early seventies was because we had a number of people in the state Senate, in the House, and concerned nationally coming from Earth Day. We also had the passage of the National Environmental Protection Act and a very supportive governor, Tom McCall. For example, take the Bottle Bill. If we hadn’t had friends in the Senate, or in the House, or had an unsupportive governor, we wouldn’t have had a Bottle Bill. Also, if we hadn’t have had the people who were willing to speak out, we wouldn’t have had the Bottle Bill. If you have all four, you’re going to get somewhere.

Don Waggoner was president of the OEC from 1972 to 1974, serves on its executive committee, and is vice president of Leupold and Stevens, a manufacturer of water management and pollution monitoring equipment.
Tilth, at its founding in 1974, was a classic example of an organization whose time had come. The somewhat anarchistic back-to-the-land movement, prompted by a dissatisfaction with the urban monoculture, found roots in groups like Tilth. Many of the early back-to-the-landers were merely "tripping out" and ran to the shelter of the cities when the first winter hit. But others, such as the founders of Tilth, stayed on and have since become the new "oldtimers." These people, as represented by the work of Tilth, have taken on the tremendous task of turning around the trend of agriculture during this century from centralization and dependence on fossil fuels into an artful, ecologically sound form of farming—something that remains a central hope for any of us interested in a healthful and planet-wise lifestyle. This account of Tilth's past is based in part on conversations with Becky Deryckx, Mark Musick, and Barbara Snyder. —SJ

The agriculture symposium at World Expo '74 in Spokane, Washington, turned out to be a special event. Wendell Berry, then almost a lone voice for sustainable agriculture, spoke at the symposium and later connected with other like-minded individuals: Gigi Coe, Becky and Woody Deryckx, and Mark Musick. Soon thereafter, Berry proposed that a conference be held in the Northwest for those with specific interest in creating an ecologically based food system.

This loose group—which at that time was seen as an aggregation of "agricultural misfits"—soon realized that in order to successfully hold a conference some organization should be formed to sponsor it. "We didn't know what to call it," Becky Deryckx remembers, "but in one of our front porch conversations, the name Tilth came to me." It was a term that implied the cultivation of soil and wisdom and spirit. "It seemed to fit well," Becky recalls.

In November 1974, Tilth brought together some 800 people in Ellensburg, Washington, for the first Northwest sustainable agriculture conference. It was a gathering that surprised many: not only did small-time farmers, food co-op people, food activists, and environmentalists take part, but the longer-term provisions for building Tilth into a broadly based organization were also laid down. This included the seed for the Tilth newsletter, since many people felt strongly about the need to stay informed.

Woody and Becky Deryckx volunteered to write the newsletter from the Shelton, Washington, area. Eventually, Tilth and the newsletter (now a quarterly called Tilth, Biological Agriculture in the Northwest) moved to Pragtree Farm in Arlington, Washington.

During the spring of 1978, Tilth members in different communities formed the first Tilth chapters to involve themselves in local agriculture. (The chapters have since multiplied to 14, stretching from northern California to northern Idaho.) In that same year, the commercial aspects of sustainable farming came to the fore, and several growers formed the Tilth Producers' Co-op as a sister organization (P.O. Box 1005, Okanogan, WA 98840). TPC built an alcohol fuel plant that now produces 30,000 gallons of alcohol per year for northwest Washington organic farmers. It also operates Washington's Organic Farm Certification Program with Provender Alliance, the Northwest's trade association for food co-ops, natural food stores, warehouses, and producers (1520 Western Ave., Seattle, WA 98101).

In 1980, the regional Tilth office, as the information exchange center between the chapters, added another dimension to its networking functions. The Tilth Information Service was established to distribute books and other resources on ecologically sound agriculture, urban gardening, sustainable forestry, protection of farmland, and related subjects. The Service has published catalogs that feature book reviews and other regional access information.

Perhaps Tilth's foremost contribution to the advance of biological agriculture came with the publication of The Future is Abundant in 1982. Based on the principles of Japanese farmer Masanobu Fukuoka, Australian environmental scientist Bill Mollison, and Tilth's classic Winter Garden-
ing in the Maritime Northwest by Binda Colebrook, it spells out how to begin “developing a sustainable agriculture in the Pacific Northwest [that] will help restore the health of the land and build stable human communities.” In the spirit of this book, Tilth and its chapters continue to pioneer regenerative approaches to bioregion-specific agriculture.

Northwest Chronology

It is difficult from any point in time to pick out the significant events of the past that have shaped the future. The study of history is littered with examples of events overlooked by contemporary cultural observers that later seemed to clearly be of tremendous importance. This simple chronology of events over the last decade in the Pacific Northwest is purely subjective; the events are mostly taken from the pages of RAIN. Although we have probably missed some favorites that might be listed by other people, we hope the chronology can at least provide our Pacific Northwest readers with a few milestones to measure their own life passages by. — SJ

Tom McCall first elected governor of Oregon, November 1966
Oregon Environmental Council formed, November 1968
Washington Environmental Council formed, July 1969
First Oregon Country Fair, July 1969, Eugene, OR
Oregon Bottle Bill made law, July 1971
The Evergreen State College opens, September 1971, Olympia, WA
Alpha Farm started, April 1972, Deadwood, OR
Global Village Conference, February 1973, the Evergreen State College, Olympia, WA
Oregon land use law established, July 1973
Oregon Office of Energy Research and Planning formed, July 1973
Bend in the River Conference, July 1974, Bend, OR
Syncron Conference (Committee for the Future), summer 1974, Portland, OR
Tilth formed, summer 1974, Spokane, WA
Ecotope formed, summer 1974, Seattle, WA
RAIN, first issue published, September 1974, Portland, OR
Alternative Agriculture Conference, November 1974, Ellensburg, WA
Transition published by Oregon Office of Energy Research and Planning, January 1975
New Age Agriculture Conference, February 1975, Whidbey Island, WA
Futures Fair, April 1975, Bellingham, WA
Politics of Food and Land Conference, May 1975, Port Townsend, WA
Com/Plex: Fourth Regional Communication Conference, May 1975, Bellingham, WA
Solar Construction Workshops, RAIN/Ecotope, June 1975, Soap Lake, WA
Living Lightly Workshops at Oregon Museum of Science and Industry, July 1975, Portland, OR
Northwest Regional Foundation formed, summer 1975, Spokane, WA
Harvest and Barter Festival, fall 1975, Okanogan area, WA
Leap Year Conference, February 1976, Portland, OR
National Center for Appropriate Technology (Butte, MT) funded by Community Services Administration, February 1976
Tools for Transition Conference, March 1976, Seattle, WA
Building Community Conference, April 1976, Olympia, WA
Community Strength Conference, April 1976, Portland, OR
Composting and Waste Recycling Conference, May 1976, Portland, OR
United Nations Conference on Habitat, May 1976, Vancouver, B.C., Canada
First New Western Energy Show, summer 1976, MT
Drought year in the Northwest, 1977
First Equinox Gathering, March 1977, Sandy, OR
Oregon Energy Fair, April 1977
Solar 77 Northwest Conference, July 1977, Portland OR
International Solar Energy Society Northwest Chapter formed, January 1978
Northwest Coalition for Alternatives to Pesticides formed, February 1978, Eugene, OR
Provender Alliance formed, July 1978
Appropriate Technology Small Grants Program starts, September 1978
Oregon Appropriate Technology, Inc., formed, November 1978, Eugene, OR
Women in Solar and Appropriate Technology Conference, December 1978, Seattle, WA
Whiteaker Neighborhood Grant, July 1979, Eugene, OR
Come Unity Conference, August 1979, Deadwood, OR
Portland Energy Policy Plan adopted, August 1979
Women and Energy Conference, August 1980, Portland, OR
Permaculture Conference, May 1981, Portland, OR
Not Just a Country Fair
by Camille Cole

The Oregon Country Fair marked its 14th year in 1983. The first Fair, in 1969, was initiated for the benefit of a children’s alternative school. For the craftspeople and vendors, the first step was an experiment in the search for making a living on one’s own terms—the quest to integrate their work with their personal identity and family life. And for the early patrons, the benefit was exposure to an assembly of images of a better way of life. The magic was contagious, and a sense of community was born.

The Oregon Country Fair has come to be more than a craft fair, more than the annual counterculture gathering. It is a community, a showcase, the reaffirmation of a lifestyle, the circle around the fire, and a dream that has become a tradition for those who have participated over the years.

The site of the Fair is a patch of country meadow. It is transformed each July into a world of fantasy and creative expression—a place where, even with the world in its present state of unrest, people of all ages and conditions can gather for three days to celebrate their art and the art of living cooperatively. It is also a place where hope, where belief in change, and where the desire for a different future are the common bonds. The theme (and the lifeblood) is a cooperative spirit, and the event itself is an extraordinary celebration of shared values and common cause. The creation of this event depends on long hours of planning (seven to eight months in advance) and labors of love by the many dedicated organizers and workers—all pulling for the public good. The organization is based on collective management and democratic decision making. The collective planning effort includes provision for traffic control, security, medical aid, information, water, registration, communication, garbage, craft-booths, food vendors, and educational displays.

And, as the ever-dependable July sun rises on the first day of the weekend celebration, we find ourselves among the crowds of familiar people, and everything is charged with beauty. Imagine a mandala landscape, shrouded with rainbows and open, smiling faces—a crystal vision of peace and harmony. Security is tight, traffic is flowing, wooden barrels are filled with water, youngsters and oldsters are having their faces painted. Strolling along the crowded path, shuffling their feet in the loose straw, passers-through experience every sort of fanciful pleasure and are covered with a fine layer of dust. Ambrosia, fandango, and melody sustain the senses. Brilliance and gaudery excite even the skeptics. At the heart of the assemblage, in Community Village, you discover demonstrations of energy conservation techniques and appropriate technologies. There’s an integral house equipped with a composting toilet; beekeepers, networkers, natural healers, organic gardeners, midwives, and New Games.

In a remote corner of the Fair, a distance from the central fires, the scent of gourmet French dinners and steam from a public sauna fill the air. Old friends meet with a joie-de-vivre amidst jugglers and the finest handcrafted wares in all the land. When delivered to the Main Stage, the melodies and movement pull you in, and the energy spreads like a bonfire in the wind.

Finally, Sunday afternoon is spent, sunlight fades, and as we wind our way back to the beginning of the great figure eight, campfires begin to crackle, and we bid farewell until next year. Seasoned friends have strengthened bonds, and as the ranks drift back to the world, they carry with them the affirmations of hope that will help them along the way.

Glancing back over the last 14 years, we see that the time of innocence has been both lost and preserved. Many staff members and other participants are the same people as before. Each year they are older, have new children, children are older, and most of us look a bit weathered. Today, the Fair is better organized and more concerned with making money and cutting expenses—a reflection of the over-all community. And with the purchase of the Fair site (242 acres) in 1982 (through the support of 1800 craftspeople and 750 staff), the Fair is assured a permanent presence in our lives.

Portions of this text have been taken from a book in progress by the author, Camille Cole. Fundraising efforts are being made to cover the printing and binding of Country Fair. Those interested in assisting in this effort can reach her at 503/484-7181.

Portland’s Neighborhood Renewal
an interview with Mary Catherine, former director of Portland’s Office of Neighborhood Associations

Neighbors working together to create or sustain livability in their community is hardly new. One can trace such organizing back through the decades. The neighborhood groups that formed in the 1950s in this country were mostly set up as business booster organizations. But those groups have few similarities to the neighborhood groups established in the late sixties and the seventies. Perhaps this country has never seen, and may never see again, such a grassroots movement. Again, as has happened so often before, the spawning of this movement was the result of actions, called generically “urban renewal,” that one would hardly expect to result in a new way of looking at governance. But the neighborhood movement has done...
just that: the "innocent" federal
time response to the interference with
cities in the sixties has resulted in an
unprecedented new relationship
between citizens and their govern­
ment. In this brief article, Mary
Catherine, one of Portland’s early
neighborhood activists, discusses
some of the early events in Portland’s
neighborhood organizing” —SJ

RAIN: What events led up to
organized neighborhoods in
Portland?

CATHERINE: One event took
place in northwest Portland. In
August 1971, I took a position
with Good Samaritan Hospital to
help the neighborhood and the
hospital work out their differ­
ences over a project the hospital
had proposed to the federal
government involving expansion
of the hospital into the neighbor­
hood. The neighborhood associa­
tion in the area, the Northwest
District Association (NWDA),
was opposed to it because it
would change the character of
the neighborhood, including the
razing of some prime Victorian
housing.

In July 1972, I took on a part­
time position as executive direc­
tor of the Northwest District
Association, and in the end the
neighborhood and the hospital
worked out a compromise. The
action had brought out the neigh­
borhood activists, and things
would never be the same.

Another factor in the develop­
ment of neighborhood associa­
tions in Portland was the an­
nouncement of building of major
freeways. In southeast Portland,
it was the ill-fated Mt. Hood
Freeway, and in southwest and
northwest Portland, the I-405
connection. Both announcements
incited more neighborhood
grassroots activity.

At about this same time, Neil
Goldschmidt was elected mayor,
and Mildred Schwab was ap­
pointed to fill Goldschmidt’s City
Council position. That complex­
ton of personalities touched off a
different approach to neigh­
orhood activity in Portland.

A study was done on neigh­
orhoods, and it came to Schwab for
consideration. She felt that city
ordinances should come out of
the study and opened a job for
someone who would carry on
with the study. I had been
NWDA director for a year, ap­
plicated for the job, and got it.
My first task was to figure out what
kind of language the city could
adopt that would make sense to
the neighborhoods. So a number
of us—city staff and neighbor­
hood leaders—sat down and
pulled together a draft of recom­

and they were adopted in January
1974.

RAIN: And what did the ordi­
nances spell out?

CATHERINE: They spelled out a
process for a relationship be­
tween the city and its neigh­
borhoods. A central part of that
being the formation of the Office
of Neighborhood Associations
which would funnel funds out to
the neighborhoods by establish­
ing contracts with recognized
neighborhood groups. I think it
was the first city in the U.S. that
did it by contract.

RAIN: How did the contracting
process work?

CATHERINE: A group of neigh­
bors could form a nonprofit
 corporation, like the NWDA, and
contract with the city for running
a neighborhood office. The neigh­
bors would interview applicants
and make the initial selection and
send the person’s name to the
appropriate city commissioner
for review.

Over the years the relationship
between the city and a neighbor­
hood groups has become more
complex. The neighborhoods can
now send in their budget re­
quests for neighborhood im­
provements through the Office of
Neighborhood Associations, and
new functions have been added,
including a neighborhood crime
program and neighborhood
mediation program.

RAIN: So, how did the advent of
organized neighborhoods affect
city government?

CATHERINE: The city leaders
have become more sensitive.
They used to see someone come
in and start testifying, and they
had no idea whether that person
had touched base with anybody
else or was only representing his
or her own self-interest. Well,
now they have a reasonable
degree of confidence that when a
neighborhood leader comes to
them and says, "we’ve done a
survey about needs in the neigh­
orhood, and this is what we’re
recommending,” the City Council
has more confidence in acting
upon the recommendations.
ADVERTISING

RAIN Advertising Policy
RAIN accepts both classified and display advertising. Classified ads cost 30¢ per word. As a special service during these times of high unemployment, work-related ads (see "Worthy Work") are only 15¢ per word. Prepayment required.
All ads are accepted at RAIN discretion. The advertising of products and services in RAIN should not be considered an endorsement. RAIN is not responsible for product or service claims and representations.
For information on display ads and a rate sheet contact: RAIN Advertising Dept., 2270 NW Irving, Portland, OR 97210; 503/227-5110.

CLASSIFIEDS

SINGLE PROFILE NEXUS creates a nationwide network of cultured singles.
Box 7484-A, Orlando, FL 32854.

THE AQUARIAN SOCIETY is being formed. Divine healing center. New World order. For information send dollar and LSASE to The Aquarian Center, P.O. Box 706, Trinidad, CA 95570.

CONDOMS, FOAMS, CREAMS, AND JELLIES. Large variety at discount prices.

SOLAR AND ENERGY SAVING PRODUCTS Catalog! Materials; Components; Complete Systems. 80 Pages, 18 Sections. Our 10th year! Order from one expert source—the country's largest energy saving mail order house! Call us at 603/668-8186 or send $2.00 postpaid. SOLAR COMPONENTS CORPORATION, Dept. 71, P.O. Box 237, Manchester, NH 03105.


SELF-RELIANT VILLAGE: Join our existing intentional community in stable rural setting for more secure, satisfying future. Stressing individual freedom, sustainable gardening, energy-efficient houses, cooperative projects for mutual benefit. (Not a commune nor religious cult.) Ponderosa Village, Rt. 1 #17-6, Goldendale, WA 98620; 509/773-3902.

WORTHY WORK
EDITOR FOR HIRE. Former editor with RAIN and with California Office of Appropriate Technology seeks position with public interest organization or magazine. Excellent editing and writing skills. Broad knowledge of social change issues. Well organized and dependable. Contact: John Ferrell, c/o RAIN, 2270 NW Irving, Portland, OR 97210.

CREDIT UNION MANAGER. A neighborhood credit union in Indianapolis, Indiana, is seeking a volunteer manager. An apartment, board, medical insurance, and clothing allowance are provided. Position requires accounting and/or business background, with good communication and organizational skills. The manager is responsible for internal operations, volunteer coordination, and public outreach. Position available Dec. 1, 1983. If interested, send resume and personal letter to: Near Eastside Community Federal Credit Union, 2234 East Tenth Street, Indianapolis, IN 46201. Tel. 317/635-6601.

RAIN INTERN PROGRAM: Rain has an on-going intern program which enables staff interns to gain a thorough knowledge of magazine publication and resource center operation. The work is a mix of activities including promotion, library and office maintenance, information requests, publicity, and local educational or organizing efforts. Applicants must be self-motivated and able to work with minimum supervision; technical skills are appreciated though not necessary. A three-month commitment is required. Benefits include a stipend of $40 per week and the excitement of being in touch with the latest information from around the country. Send resume to Rob Baird at RAIN.

DEALERS WANTED. Sell Composting Toilets on commission. Contact: CTS, Rt. 2, Newport, WA 99156; 509/447-3708.
To find a job with a future, look into Community Jobs. Every year we list over 2,000 new jobs in community work nationwide.

Jobs in the environment, education, health care, housing, the media, and more.

We've Seen The Future

AND IT WORKS

In addition—
- We examine the major issues of concern to people and organizations working for a better future.
- We interview the individuals who are leading the battles.
- And we tell you "how to"—get a job, get involved, or make your organization more effective.

NO-RISK GUARANTEE! If for any reason you want to cancel your one-year (10 issues) subscription, you'll get a full refund on unmailed issues.

□ $12.00 □ $15.00 □ $24.00
Individual Nonprofit Library or 40% off the Organization Institution cover price

□ Payment enclosed. □ Please bill me. □ I've enclosed an extra $10 for first class delivery.

NAME ____________________________________________
ADDRESS _________________________________________
CITY STATE ZIP ____________________________________

THE EDIBLE CITY RESOURCE MANUAL
Richard Britz
335 pp., illustrated

A guide to urban agriculture, appropriate technology, and neighborhood transformation, from the Whiteaker Project in Eugene, Oregon.

- Block Farms
- The Urban Orchard
- School Farms
- 48 Teacher's Lessons/Activities

YES! Please send ______ copies at $14.45 each.

I enclose payment of $_________.
(California residents add sales tax.)

NAME ____________________________________________
ADDRESS _________________________________________
CITY STATE ZIP ____________________________________

Return to: William Kaufmann, Inc.
Department R21
95 First Street
Los Altos, CA 94022

Technologies for the developing world . . .

VITA News brings them to you with provocative reporting, how-to facts, and striking graphics.


VITA News provides clear, useful information for development experts, field workers, and the interested public alike. And it offers advertisers worldwide customers for renewable energy equipment, farm tools, water resources, and development services.

VITA News is the quarterly magazine of Volunteers In Technical Assistance (VITA), the nonprofit organization that's been providing technical assistance to developing countries for almost a quarter century. Join our more than 30,000 readers.

DOES IT: Build nuclear weapons? Pollute the environment? Support repressive regimes?
Encourage on the job discrimination?
OR WILL IT: Construct a hydro plant? Renovate a neighborhood? Provide good jobs? Produce high quality goods and services?
Find out in GOOD MONEY, the newsletter of social investing and inventing, a bi-monthly, 12 page newsletter. Subscribers get 100 unedited words that are published in NETBACKING — a separate, bi-monthly newsletter.
Good Money also offers direct investment analysis services for individual and institutional investors. Yearly subscription rates: $108/corporations, $36/individuals and nonprofits, $12/students, and incomes under $13,000. Send $3 for sample copy or ask for brochure. Good Money, Dept. RN/B, Main St. Montpelier, VT 05602

Let the SUN shine in... with the  
PASSIVE SOLAR WATER HEATING SYSTEM
Solar Water Works
Passive Solar Hot Water Heating Systems
- Gas Tankless Water Heaters
- Heat Traps (Save up to 12% per year on hot water bills.)

2340 S.W. 15th, Albany, OR 97321 (503) 928-0956

GOT THE BAD-NEWS BLUES?
Are reports of hugger bombs, shrinking social services and Moral Majority crusades getting you down? Are even your favorite left-wing magazines mired 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, feminists, conscientious objectors, Indian activists, the Anti-Klan Network — these are just a few of the folks 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 $21 for a year (22 issues) of WIN ($25 Canada or overseas) or $11 for a 6-month taste, or $1 for a sample copy. Send your name and address with a check or money order to WIN/Dept. 1426 Livingston St./Brooklyn 11217
"Perhaps the Most Fascinating Gardening Magazine of All..."

That's what readers say about our wonderfully new and different kind of news-magazine for gardeners— from beginners to experts from coast to coast.

There's no outside advertising in the Gardens for All "Newsmagazine," no pesky cards to tear out... just the timely and well-researched gardening news and information you are looking for.

We'll send you a FREE sample copy

We'd like all RAIN readers to have a look at our Newsmagazine, to judge for yourself the quality of our gardening information, range of topics, and sharp, colorful presentation.

Please fill out the coupon today, and send for a FREE sample issue.

The Gardens for All Newsmagazine will bring you time-tested secrets of master gardeners. Large show-how photographs, and full-color charts of good and bad insects, plant diseases, nutrient deficiency signs, and more.

There's also news of garden tools and aids that can make your gardening easier and better... and tips on best varieties for your region and climate, and much more.

"I love your wonderful paper. Thanks for one of the greatest gardening helps on the market."
Maxine Peterson
Molalla, Oregon

"Your publications are the most helpful and practical I've ever discovered."
Elaine Bertram, Master Gardener
Seattle, Washington

---

Two NEW Books from Gardens for All

The Youth Gardening Book
"A complete guide for teachers, parents, and youth leaders"

This 160-page illustrated guide includes over 75 exciting, educational projects for kids. It's the perfect gift for a scout leader, teacher, parent or neighbor who could share the joys of gardening with younger people.

By Lynn Ocone, GFA's Director of Youth Gardening

The Community Garden Book
"New directions in creating and managing neighborhood food gardens in your town"

A brand-new, ultra-practical 136-page guide to developing a smooth-running, productive community garden. If you or anyone you know has thought of turning some under-used or vacant land into a garden, you'll want to order this book immediately.

By Larry Sommers, GFA's National Community Gardening Director

---

Congratulations and "Thank You" to RAIN and staff on your Tenth Anniversary!

Gardens for All
The National Association for Gardening
180 Flynn Avenue, Burlington, VT 05401

□ YES! Please send me a FREE SAMPLE COPY of the Gardens for All NEWS together with an invoice for fifteen dollars for one year's dues (including 12 big issues of the NEWS) in Gardens for All, The National Association for Gardening. If I decide I do not want to join I will simply write "No Thank You" on the invoice and return it to you, and we'll still be friends.

Send Me the Following Books:

□ 1-1019 The Youth Gardening Book
   $8.95 each, postpaid

□ 1-1022 The Community Garden Book
   $8.95 each, postpaid

(Please send payment with book orders.)

Name__________________________
Address________________________
City________________ State____ Zip____
Ancient Crops for Future Needs — The American Southwest contains much of the remaining diversity of corns, squashes, beans, and other food crop varieties that were found on our continent when Columbus landed. But fewer and fewer Native American farmers are planting these crops every year. An organization called Native Seeds/SEARCH is undertaking nonprofit education and research and in an effort to save these crops and their wild relatives. Native Seeds/SEARCH notes that preserving plant diversity is important in itself since it allows us greater food options for the future, and several Southwest crops already show special potential: high protein and mineral content, good taste, and superior tolerance to drought, heat, disease, and insects. To learn more about the work of Native Seeds/SEARCH, write them at 3950 W. New York Drive, Tucson, AZ 85745.

Nuclear Teaching AIDS — Are you an elementary or high school teacher in need of curriculum material on nuclear weapons and nuclear energy that will serve to counterbalance the arguments of the Atomic Establishment? The Nuclear Information and Resource Service (NIRS) has published two selected bibliographies — "Growing Up in a Nuclear World" for the elementary grades and "Nuclear Dangers" for high schools. The bibliographies include annotated lists of background readings, lists of organizations concerned with peace and safe energy, audiovisual materials, curriculum guides, and other teaching aids. Either bibliography may be ordered for $5.00 plus $.85 postage from NIRS, 1346 Connecticut Avenue, NW, 4th Floor, Washington, DC 20006.

Building Like They Used To — We recently heard from some senior citizens in Nebraska who are producing a refreshing alternative to the usual plastic playthings for young people. The seniors are handcarving, assembling, and painting miniature (about 18") toy wooden wagons that are close replicas of the vehicles used by farmers, policemen, mailmen, etc., in the late 19th and early 20th centuries. They tell us each wagon takes days to produce. Request a brochure from: Farm Wagons, 1412 Seventh Street, Columbus, NE 68601.

Cal-OAT Bounces Back — California's new Republican governor, George Deukmejian, is setting a very hard time ridding his state of some of Jerry Brown's more innovative programs. First it was the Governor's Council on Wellness and Physical Fitness that refused to die. Abolished by Deukmejian in January, the Council simply went underground and re-surfaced as a private nonprofit corporation. Now comes word that some veterans of the Office of Appropriate Technology (OAT), which was also abolished by the new governor, have regrouped and formed an independent, nonprofit advocacy and consulting organization—called the Office of Appropriate Technology! We'll tell you more about the new OAT-in-Exile in upcoming issues of RAIN.

Science and Social Action for Health and Peace is the theme of a convention to be held in Dallas, Texas, November 13-17. This American Public Health Association sponsored conference offers over 400 workshops and presentations on topics ranging from the Hospice Movement to Abortion, and from Microcomputers to Breastfeeding. For information and registration write APHA, 1015 Fifteenth St., NW, Washington, DC 20005.

Ashley Montague, O. Carl Simonton, and Michael Prichard are several of the faculty who will speak at a conference on The Healing Power of Laughter and Play to be held in Palo Alto, CA, and Anaheim, CA, November 4-6 and November 18-21, respectively. This conference will demonstrate the uses of humor in the healing arts and identify the psychological effects produced by laughter, play, dance, and imagery that have been recognized as effective in helping to balance stress and mobilizing self-healing potential. For more information and registration write APHA, 1015 Fifteenth St., NW, Washington, DC 20005.

Here are two seminars for those interested in organizational fundraising. The Grantsmanship Center is offering a series of two intensive three-day workshops at locations in 30 cities in the U.S. in the coming months. A Foundation and Corporate Funding seminar will provide information regarding sources, services, and strategies for fund acquisition. These seminars will be available in Phoenix, AZ, and San Francisco, CA, Nov. 14-16; Madison, WI, Nov. 15-17; and Columbus, OH, Dec. 14-16. A Grant Proposal Writing seminar will focus on objectives, approaches, and designs for fundraising proposals. Seminars will be offered in Los Angeles, CA, Nov. 17-19; New Orleans, LA, Nov. 28-Dec. 2; Cleveland, OH, Nov. 30-Dec. 2; and New York, NY, Dec. 5-7. For details and other locations write the Grantsmanship Center, 109 S. Grand Ave., Los Angeles, CA 90015, or call 800/421-9512 (in CA, AK, or HI call 213/749-4721).

Midwest Energy Education Consortium has organized a one-day conference for energy resource and service people, to be held on December 8 at George Williams College in Downers Grove, IL. The conference will include short workshops on new energy technologies, networking to share resources, and tools for reaching consumers. For more information write Molly Redmond, MEEC, 312 Security Building, 2395 University Ave., St. Paul, MN 55114, or call 612/642-9046.

The Mid-Atlantic Solar Energy Association is sponsoring a two-day, state-of-the-art conference and exhibit for builders, contractors, architects, engineers, and vocational/technical teachers. Super Insulation for the Mid-Atlantic Region will be held on Friday and Saturday, November 18 and 19, at the Sheraton Hotel, Valley Forge, PA. Intensive conference sessions will address the appropriate use of high levels of insulation for both renovation and new construction. Solutions to problems of indoor air quality, vapor and moisture, heating and cooling, glazing, and the integration and cost/benefit of solar energy systems will be discussed. For further information and registration contact Irisita Azazy, MASEA, 2233 Gray's Ferry Ave., Philadelphia, PA 19146, or call 215/545-2150.

Selling Solar Successfully will be the theme of the Florida Solar Energy Center's (FSEC) first solar merchandising short course to be held at Cape Canaveral, Florida, November 16-17, 1983. Guest luncheon speaker Bruce Anderson, executive editor and vice president of Solar Age magazine, will discuss expanding solar horizons, current solar industry trends, and the underlying strengths of the industry in relation to successful companies that have weathered the storm. The Florida Solar Energy Center will also conduct a series of two-day short courses at FSEC and throughout Florida on the design of solar energy systems, passive design elements, and low energy usage features in the design and construction of new school buildings and the upgrading of older school buildings. The short course will include a review of legislative requirements, energy use in schools, passive design, and natural ventilation. This seminar will be given December 2, 1983, and January 12-13, 1984, in Cape Canaveral, FL. For more information on any of these FSEC events contact Shay Southwick, FSEC, 300 State Rd. 401, Cape Canaveral, FL 32920, or call 305/783-0300.
RAIN PEOPLE PACKAGES:  
Schumacher, Lovins, Bender, Selected Interviews

Over the past decade, RAIN articles and interviews have highlighted the thoughts and visions of some of the best-known figures in the appropriate technology/social change movement. Get to know some interesting people (or meet them again) through these RAIN Back Issue Packages. Only $3.50 each postpaid.

E.F. Schumacher
CONSCIOUS CULTURE OF POVERTY, II:1
ON INFLATION, II:2
TECHNOLOGY AND POLITICAL CHANGE—PART I, III:3
TECHNOLOGY AND POLITICAL CHANGE—PART II, III:4
ON GOOD WORK, III:9

Amory & Hunter Lovins
ON OVER-ELECTRIFICATION (BY AMORY), III:3
GETTING EFFICIENT (BY AMORY), VI:2
RAISING A FLEET OF RABBITS (BY AMORY), VII:4
SOFT PATH HITS HARD TIMES (BY AMORY & HUNTER), VII:8
REAL SECURITY (BY AMORY & HUNTER), IX:5

Tom Bender
WHY BIG BUSINESS LOVES A.T., IV:4
SELF-RELIANT ECONOMICS, V:3
THE DREAM OF GREED, V:8
HOMETOWN ROOTERS OR CORPORATE LOOTERS? V:9
IS POPULATION A PROBLEM? (WITH LANE DEMOLL), VI:4

RAIN Interviews
WINONA LA DUGE (OF WOMEN OF ALL RED NATIONS), VI:5
KARL HESS (AUTHOR OF COMMUNITY TECHNOLOGY), VII:2
JOHN TRUDELL (OF THE AMERICAN INDIAN MOVEMENT), VII:3
BRUCE STOKES (AUTHOR OF HELPING OURSELVES), VIII:4
KIRKPATRICK SALE (AUTHOR OF HUMAN SCALE), VIII:6

RAIN Subscriptions
1 year/institutional rate .......................................................... $25.00
2 year/individual rate ............................................................ $25.00
1 year/individual rate ........................................................... $15.00
1 year/living lightly rate ......................................................... $ 9.50
(income under $6,000)
Foreign surface mail ............................................................. add $3.70/year
(including Canada and Mexico; inquire for air rates)

RAIN Back Issues (postpaid)
*Individual back issues .......................................................... $ 1.20
*Back issues by volume, per volume (III-VIII) ......................... $ 9.00
*Complete back issue set, Volumes III-VIII .............................. $42.00
Complete guide to back issues, Volume I-VIII .......................... $ 50
*Does not include Vol. VIII, No. 3, Knowing Home)

Name
Address
City State Zip

☐ Hide my name when you exchange lists!

Send a gift subscription to: payment must be included)

Name
Address
City State Zip

SEND TO: RAIN, 2270 NW Irving, Portland, OR 97210

RAIN Publications (indicate quantity; all prices include 20% for postage and handling)

Information & Communication Technology ................................ $ 6.00
Knowing Home ................................................................. $ 6.00
Stepping Stones ................................................................. $ 7.00
Rainbook ................................................................. $ 7.00
Stepping Stones Poster ....................................................... $ 3.60
Urban Ecotopia Poster ....................................................... $ 3.60
Suburban Ecotopia Poster ................................................... $ 3.60
Community Alert Poster (in color) ......................................... $ 6.00
The Future Is Abundant ........................................................ $11.95
You Can Can With Honey .................................................... $ 2.50
Solar Water Heater Manual, revised ...................................... $ 7.00
Complete Publications List .................................................. free
Schumacher Package ......................................................... $ 3.50
Lovins Package ............................................................... $ 3.50
Bender Package ............................................................... $ 3.50
Interview Package .......................................................... $ 3.50
RAIN T-Shirt (S/M/L/XL) ..................................................... $ 7.50

40% discount on orders of 5 or more copies of Knowing Home, or on orders of 5 or more posters (any combination).

SUBSCRIPTION ........................................................... ...
GIFT SUBSCRIPTION .................................................... ...
BACK ISSUES .............................................................. ...
PUBLICATIONS ............................................................ ...
DONATION (tax deductible) ...................................................
TOTAL ENCLOSED ................................................................

All orders must be prepaid in U.S. Dollars. For those requiring an invoice, billing fee is $5.00.
RAIN T-Shirts!

Lead a more simple and satisfying life in a durable, ecologically sound RAIN T-Shirt! This beautiful, heavy-weight, 100% cotton shirt is available in four sizes and one living color (beige). Perfect for gift giving!

Magazine/
Community Resource Center
2270 NW Irving
Portland, Oregon
(503) 227-5110

Send a gift T-Shirt to a friend! For an additional $.50 (total cost $8.00) we will send your gift together with a card naming you as the giver and including your message.

Gift T-Shirt for:
Name ___________________________
Address ________________________
City ___________________________ State ______ Zip
Size (unisex S/M/L/XL) ________
Message ________________________

Send to: RAIN, 2270 NW Irving, Portland, OR 97210
(Allow 4 to 6 weeks for delivery)
Scenes From The First RAIN Decade


RAINHOUSE RENOVATION: (L to R) Steve Johnson, Lane deMoll, Lee Johnson (1975).

VOLCANO ALERT: Editor Carlotta Collette protecting herself from airborne ash following the eruption of Mount St. Helens (1980).

RAIN IN CHINA: Judy Elliott of the Farallones Institute and John Ferrell of RAIN help build a solar water heater in a commune village during the first Farallones/New Alchemy China tour (1980).

THE NORTHWEST EXPERIENCE: Founding Rainmaker Steve Johnson showing his bioregional awareness (ca. 1976).
Taking Pictures and Taking Souls

This brief essay on the hazards of tourism and the meaning of “place” originally appeared in our May 1976 issue. It exhibits a special quality we like to refer to as “RAIN magic”: that occasional fusion of vivid imagery and timeless wisdom which serves to remind us what RAIN is about.—JF

Drinking wine one recent evening with Florian Winter, an Austrian visiting us on a global survey of renewable energy developments for the U.N., we got into talking about the destruction of European cathedrals by tourism. Each person came, he said, and took away a little of the cathedrals—in their camera, in their mind, or in their conversation—and now nothing remains.

In that absurdity there is truth. All places live through the reverence with which we hold them—without which they crumble to pieces, unloved, unmaintained, abandoned, and destroyed. That reverence is the glue that in reality binds the stones and the blood that in truth sustain the life of a place.

For the life of a place lies in its relation to the people that share it. And it is that reverence first which is taken away, piece by piece, flashbulb by flashbulb, postcard by postcard, tour group by tour group. Without this reverence, a place has nothing to give those whose lives it must sustain, and they in turn lose their nourishment and fall into the same dereliction as their cathedral.

It need not be so, for the visit of a pilgrim differs from that of a tourist. A pilgrim brings love and reverence, and the visit of pilgrims leaves behind a gift of their reverence for others to share.

We scorn the people of other cultures who are angered when we wish to photograph them and cast aside their belief that we take away part of their soul.

Yet we do.

For what we seek—with photographs or our presence—is sought because it is that which we lack, and that lack and our presence only prove them right and us wrong. By our taking we diminish us both.

And we lessen the soul of all places to which we go, and ourselves as well, when we take without giving and come to them without reverence to life and to land, to people and to place, to ourselves and to the creation of which we are part. That is the destruction of which tourism is part and from which tourism arises, and it is there that we again can find the healing power for our land and our lives. —Tom Bender