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RAIN

OCTOBER 1980

▣ FUELING THE PEOPLE
▣ ECOLOGY AS POLITICS



Volume VII No.1

\$1.50—No Advertising

Letters

Dear Carlotta,

Thanks for the June copy of *RAIN*. We were glad to see Scott Sklar's plug for Lance's book, *Making Alcohol Fuel*.

You might want to make mention of my book on car conversion. I have driven to Oklahoma and back twice since March. The car has been on straight alcohol for over a year now and has covered 12,000 miles with this fuel alone. This is an area where we have a track record ahead of virtually everyone else.

The weather has been warm this last week, but is beautifully cool today. Minnesota is a great place to be in the summer. We don't miss the volcanos a bit.

Regards,
Al Rutan
Minneapolis, MN

Dear Rainfolks,
Sorry to hear about your financial woes. Wish we could give you more.
Keep up the good work—we love ya!
Best regards,
Alan Locklear
Marie Valleroy
Seattle, WA

Dear folk,
I am looking forward to the day when I can contribute directly (my skills) to what has been called counterfoil research.
Presently employed as electronic engineering technician at Tektronix, fixing up my old salt-box house, and trying to get a house shop together.
For now, please accept this donation to your essential work.
Your proud reader,
Phil Voyda
Portland, OR

Dear *RAIN*,
Some food stores charge a premium for "sea salt," implying that it is richer in minerals, less refined, or more natural than other salt.

The enclosed excerpt from the book *The Forgotten Peninsula* evidences what I've suspected: that "sea salt" is purified sodium chloride and doesn't differ significantly from salt extracted from a salt mine (which was also once a sea).

As further evidence some friends and I just performed a taste comparison of "sea salt" from a natural foods store and of commercial salt. After crushing each to make the particles the same size, we could not taste any difference.

Pat Underhill
Philomath, Oregon

What about the sugar added to many "processed" salts? — LS

Dear Rainfolks,
How nice it is to read your magazine again. Living out in the woods without enough money to subscribe is enough to keep an interested reader away from a good magazine, but now that my friend and I have moved back to the city we are gaining access to your publication again. In fact, we discovered you have a "living lightly" rate, and have pooled together enough cash to subscribe.

We enjoy reading your magazine very much. It puts a lot of our feelings into words. In addition, I found your articles on feminism (April 1980) enlightening. It is good that your magazine points out the bad in society as well as the potential good. People must definitely realize something is wrong before it can be corrected, and unfortunately most Americans don't know what's wrong. I admire publications like *RAIN*, *New Roots*, and *Not Man Apart* for their efforts, and hope you can somehow become part of the background media that is so dominated by Time, Inc. and associates.

Having worked in a third world country, I was impressed by your foreign access section (July '80, pp. 8-10). It's the kind of article I can xerox and send to my family to help express my feelings toward their work in third world countries.

I've been meaning to find out more about Chinese methane digesters for over a year now, and not surprisingly your magazine pulled through for me. The *Chinese Biogas Handbook* you reviewed is too expensive for me these days, but I did make it up to the Rainhouse library to see it. Your library is a good one; I've even been lightly thinking of moving to Portland just so I could go through your collection of publications.

Truly yours,
Carlos Portela (and Anita Coleman)
Eugene, OR

RAIN Journal of Appropriate Technology

RAIN is a national information access journal making connections for people seeking more simple and satisfying lifestyles, working to make their communities and regions economically self-reliant. building a society that is durable, just and ecologically sound.

RAIN STAFF: Laura Stuchinsky, Mark Roseland, Carlotta Collette, John Ferrell Zonnie J. Bauer, Graphics and Layout

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RAIN ACCESS

An open letter to RAIN Staff and Readers,
I feel that I must comment upon some of the statements in C.C.'s generally creative and interesting review of my book, *When God Was a Woman* (April '80). The review states that the book, "focuses very negatively on the Hebrew people . . . it is unlikely that their anti-goddess attitudes were also unique." I find the reasons for these statements difficult to understand, in light of the fact that a great deal of the material in the book points out the anti-Goddess attitudes of the early Christian and Muslim religions, as well as those of the early Indo-Aryan and Indo-European groups in India, Turkey, Iran and Greece. The entire perspective of the book is concerned with offering an understanding of the broad geographic and historical network that was responsible for the eventual suppression of ancient Goddess reverence. The reviewer also seems to have overlooked the important point made in the book—that many early Hebrew people were Goddess revering, the evidence pointing to the likelihood that it was some of the members of the Levite tribe, just one of the many Hebrew tribes, who were concerned with suppressing the ancient religion. I could not help but notice that Donna Warnock's article, which obviously used *When God Was a Woman* as a resource, understood that it was the wave of Indo-European invasions that most affected the Goddess religion. (An entire chapter of the book was spent on discussing the connections between the Indo-European groups and the Levites.) So, C.C. is correct in her belief that it was not only the Hebrew people who suppressed Goddess reverence, while for some unexplained reason she did not mention that this was dealt with in the book at great length.

My most recent book, *Ancient Mirrors of Womanhood—Our Goddess and Heroine Heritage*, Vol. I, came out in November '79. As C.C. hoped, it does contain a vast body of evidence about the spiritual beliefs (legends, prayers, rituals and more) of many other cultures of the planet, e.g. China, Africa, Mexico and South America, Celtic Europe, Polynesia and more.

After spending so many years researching and studying comparative religions and spiritual beliefs of the present and the past, I do want to comment that we need not blind ourselves to past realities. We, all of us, live today. Hopefully, we can draw upon what is positive and life-nourishing as it exists in all and any religious traditions, while gleaning out what hurts or suppresses any racial, ethnic or gender group—or any aspect of life on this planet.

Merlin Stone

9980 ADA (After the Development of Agriculture)

Women's Resources
613 Lombard Street
Philadelphia, PA 19145

Contrary to what I first imagined, Women's Resources is not a graphic arts firm that produces elegant full-color posters, but it was the posters that first caught my eye. In pursuit of the posters I learned that Women's Resources is really a consulting group that "provides services to women, collects data on women, and conducts research on matters of concern to women." The services include grantwriting, management and fundraising assistance, computer mailing and data collecting, and a professional women's registry and booking service to connect skilled women with available jobs. The group can consult with an organization on a short-term basis or spend more time developing

real business plans to begin generating what it refers to as "hard money." "Hard money" is the cash that sustains groups through marketed services or products. Women's Resources can help arrange small business loans and is soon to begin operating as a broker—linking women with money to invest with women's businesses that can use the funds and provide returns on investments. The hard cash at Women's Resources comes partially from the sale of its services, and partially from those wondrous posters. The Orchid Poster (shown) has a warm plum background and multi-colored orchids. The Iris Poster, 2nd in an ongoing series, has a smokey blue background with soft rose and blue-toned irises. Each costs \$7.00 plus \$1.50 postage. Send, too, for their brochure. You'll be impressed. —CC



Orchid Poster from Women's Resources

You can fuel all of the people Some of the time...

© Hal Bernton

We're fortunate to have Hal Bernton write this article for us. A former researcher for newspaper columnist Jack Anderson, Hal has been working for some time on a book (due out in the spring) on the history, economics, and environmental impact of alcohol fuels. His research has taken him not only all around the country but to Brazil, where vast amounts of land and capital are being channeled into a massive alcohol development program. Currently he is working for the Washington Small Farm Resources Network (19 East Poplar, Walla Walla, WA 99362, 509/529-4980) to coordinate an ethanol fuel development program in the Skagit Valley.

—MR

Alcohol-Powered America

In recent months the Carter Administration has begun to implement a series of major federal initiatives to expand production of alcohol fuels in the 1980s. By the end of the decade the White House would like to see 10% of the nation's gasoline consumption replaced by alcohol fuels.

Some 1.2 billion federal dollars in loan guarantees, price guarantees, and purchase agreements to stimulate distillery construction are beginning to flow into the private sector. An eight-year extension of a generous 4 cent-a-gallon exemption for 10% gasohol blends from federal excise taxes (which works out to a 40 cent-a-gallon tax break for alcohol undiluted with gasoline) has been approved by Congress. All of this activity has been accompanied by a series of pamphlets, reports, and magazines released by various federal agencies which now extoll the virtues of an alcohol-powered America.

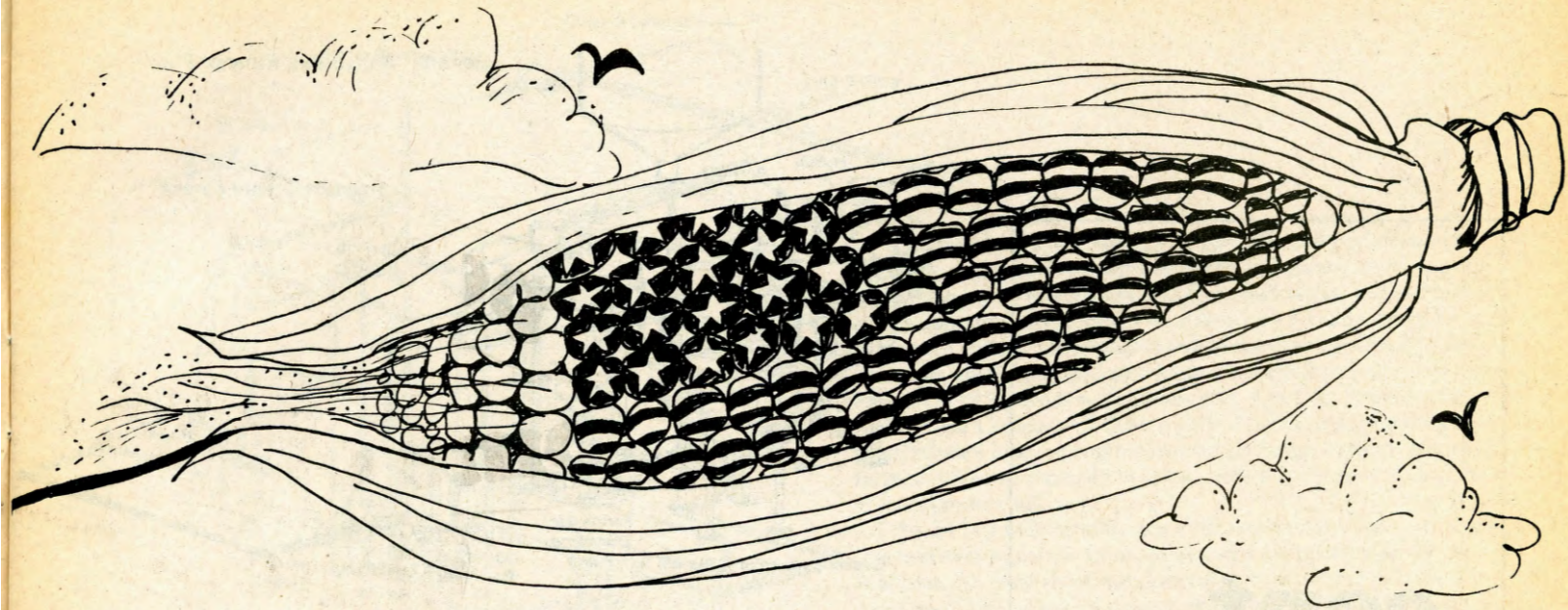
The strong federal push to promote both ethanol (which is derived from starch or sugar-rich organic materials) and methanol (derived from cellulosic-rich wood and crop materials) has evolved in a surprisingly brief span of time. Just four years ago these fuels were viewed by the Carter Administration's top energy officials as marginal resources to be taken seriously only by a handful of farm-belt fanatics who were eager to bolster sagging crop markets by converting surplus grains into ethanol. But the soaring popularity of gasohol crested with the gasoline shortage of 1979 and persuaded a politically sensitive White House to abruptly back rapid development of alcohol fuels.

A strong federal effort to increase alcohol fuels production is almost certain to continue well into this decade regardless of who takes up residence in the White House next January. Ronald Reagan has spoken out strongly in favor of gasohol in his syndicated radio commentaries, and John Anderson comes from Illinois, where gasohol has been elevated to a status usually reserved only for motherhood, apple pie and the American flag.

With gasohol sales booming at service stations across the country, most of the major oil companies have ceased efforts to block development of the new industry and are now trying to figure out ways to break into it. The infant gasohol industry is currently dominated by Archer Daniels Midlands, a large multi-national food processing corporation headquartered in Decatur, Illinois.

Archer Daniels Midland (ADM) set up a fuel grade distillery at its sophisticated Decatur corn milling facility in the spring of 1978 and began converting starchy waste streams into 199-proof anhydrous ethanol. This ethanol was marketed to a network of independent midwest service stations for \$1.30/gallon (production costs initially stood at about \$.95/gallon). Thanks in part to the federal tax breaks which kept gasohol competitively priced with unleaded gasoline, demand for ADM's production soared, far outstripping the available supply. By the spring of 1980, ADM had jacked the price of a gallon of 199-proof fuel to over \$1.80.





Jill Stapleton

The lucrative entry of ADM into fuel production has been closely watched by other major food processing corporations such as Standard Brands, Heinz, American Maize, and Cargill, all of which are considering constructing distilleries adjacent to their wet corn milling operations. One food processing firm, CPC of Iowa, has already announced a joint-financed venture with Texaco Oil Company to build a major 60 million gallon-a-year distillery in the Midwest. This deal may come under scrutiny by the Justice Department for possible anti-trust violations. Small-scale alcohol advocates, like Scott Sklar of the National Center for Appropriate Technology, have proposed federal legislation to ban the oil industry from any involvement in alcohol fuels production. So far they have not found much support in Congress.

The Case Against Alcohol Fuels

In the wake of all the activity in government and financial circles to promote gasohol, a sharp critique of the emerging large-scale industry is now being formulated by A. T. advocates and concerned members of the farming community. One of alcohol fuels' most strident critics has been Robert Rodale, publisher at Rodale Press, who has used both *Organic Gardening* and *New Farm* magazines as platforms to point out the folly of turning to the fossil fuel-dependent U. S. agricultural system to provide feedstocks for a supposedly renewable fuel. Take away the petroleum needed to power farm equipment and the natural gas needed to produce pesticides and fertilizers, he points out, and American agriculture would abruptly grind to a halt. Thus, in many respects, relying on energy crops for fuel fails to ease the nation's dependence on imported oil.

At an even more basic level, Rodale is dismayed by the idea of turning to agriculture to meet the nation's energy needs at a time when the soil base is already seriously overburdened. According to U. S. Dept of Agriculture (USDA) statistics, soil erosion is ravaging prime farmlands at a national average of twice the rate that new soil

is being formed. Since our remaining soil reserves are even more limited than our remaining oil reserves, Rodale argues that it makes little sense to turn to farm-based alcohol energy to meet the nation's long term energy needs. Once a tract of land loses its fertility it is of little use for either food or energy production.

Some congressional plans which call for taking marginal farmlands out of pasture and putting them into energy crop production could increase this already dangerous rate of soil erosion. Many of these marginal lands are hilly and particularly susceptible to the impact of water erosion while other tracts are located in dry areas vulnerable to wind erosion.

The commercialization of a new process which will enable distilleries to convert cellulosic crop residues (corn stalks, wheat straw, hay, etc.) into ethanol may also have a substantial impact on erosion rates. This technology is now being perfected by several different government- and industry-sponsored research and development projects and involves the use of mutant offsprings of the trichoderma enzyme to break down the long carbon chains of cellulosic materials into the simple sugars necessary for successful fermentation. Gulf Chemical, a subsidiary of Gulf Oil, has already successfully tested a small pilot plant for the production of fuel grade ethanol from crop and paper wastes, but dropped plans to build a full-scale "demo" in 1979. Then, in a somewhat surprising move, the company donated the entire project and staff to the University of Arkansas.

cont.

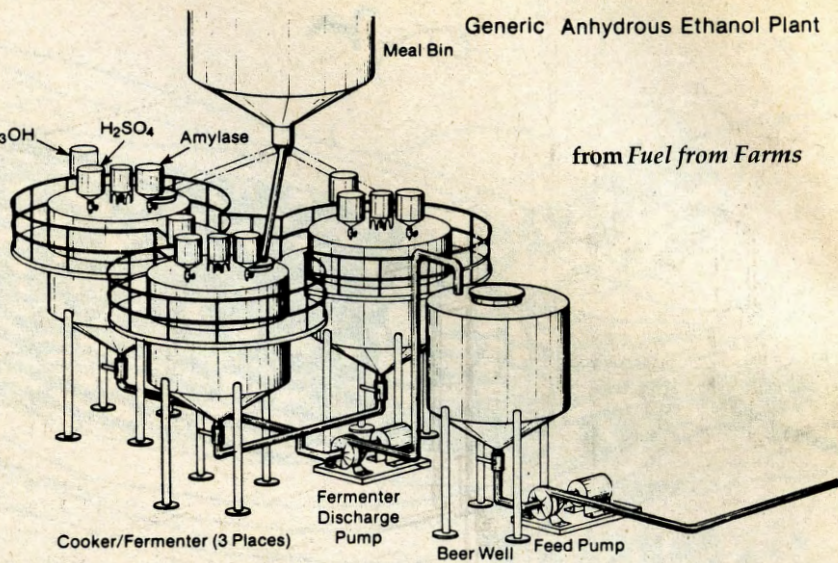


cont.

Rodale fears that once this technology is in widespread use, there will be a massive harvesting of crop residues which should be returned to the soil to maintain long term fertility. "The crop wastes that would . . . be put in the stills . . . are a main bulwark against erosion," Rodale writes. "They add humus to the soil so hard rains can soak in instead of washing the soil away. And these so-called wastes recycle minerals and nitrogen back to the soil—fertilizer elements which otherwise would have to be replaced at a high cost in fossil fuels."

The importance of these crop residues in the prevention of erosion was well documented in a major USDA study by agronomists who concluded that "When returned to the soil, crop residues retain plant nutrients and help maintain soil porosity and tilth for easy tillage and good plant growth. . . . Proper use of crop residues can be the best means to control wind and water erosion and maintain the quality of water running off agricultural land."

In their final report, released in March of 1979, the USDA scientists stressed that only a small percentage of the crop residues could be safely removed from the land for conversion into ethanol. In the



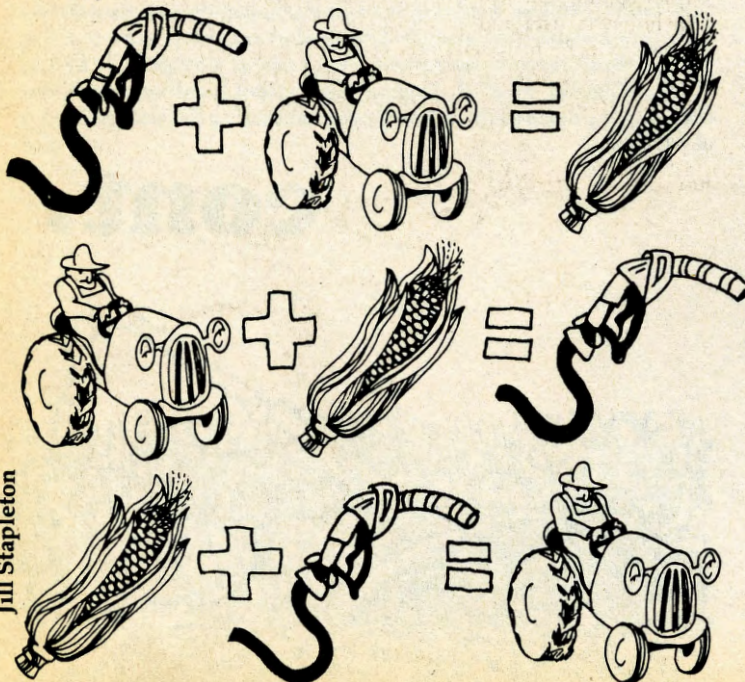
corn belt states, the scientists calculated some 36% of the residues could be harvested without damaging long-term soil fertility compared to only 21% in the Great Plains states. In Virginia, the Carolinas, and Georgia, some 40% of the crop residues might be used for alcohol production but only a miniscule 10% of the residues could be safely utilized in Alabama and Mississippi cotton fields.

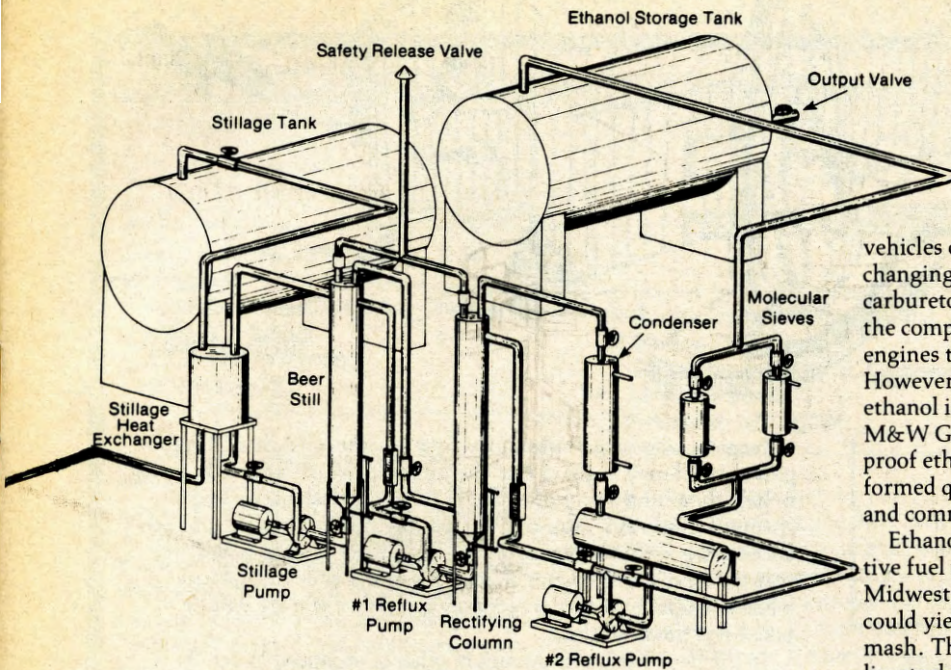
In an ideal world, the nation's farmers would surely heed the agronomists' warnings and remove only the recommended percentages of their crop residues from the soil. But when financially strapped farmers are suddenly offered cash payments for all their crop residues from a nearby distillery, they might well be tempted to trade off long-term soil fertility for more immediate profits. A soil conservation official would criticize the farmer for such a move—but the farmer might well reply, "It was either sell the entire field of crop residues to the distillery this year or go bankrupt next winter when I can't pay off my bank loans." In today's world, economic—not environmental—considerations are primary in determining land use on most U.S. farms.

Rodale has also not hesitated to bring up the "Food versus Fuel" issue. A variety of grim future scenarios have been painted in which prime farmlands are converted over to energy crop farming for gas-guzzling automobiles while millions of the world's poor starve. The risk of such a warped development of the alcohol fuels industry is greatest in Brazil, which is already utilizing large areas of fertile farmlands for sugar cane-based ethanol production. Since less than 10% of Brazil's populace can afford to own automobiles, it seems apparent that vast amounts of Brazilian financial capital and resources are being funneled into a program for the benefit of an affluent minority. Although the massive Brazilian alcohol development program (designed to accomplish a near complete transition away from petroleum-based fuels by the end of the century) will create some jobs in rural areas, it will also reinforce agricultural development policies which have long favored export cash cropping over diversified agriculture targeted to meet the basic food needs of the Brazilian people. The by-products of the sugar cane distillation process have little nutritional value for either livestock or people.

Toward an Alternative Fuel Network

The creation of a broad-based ethanol industry in the United States would not necessarily result in any reduction of world food supplies. The dominant ethanol energy crop in the United States for at least the next decade will probably be corn, much of which is now fed to livestock. The ethanol distillation process does not destroy the livestock feed value of the remaining corn but actually enhances





vehicles can readily be converted to run efficiently on ethanol by changing plastic parts susceptible to ethanol corrosion, boring out carburetor jets to establish proper air to fuel ratios, and increasing the compression of engines. The technology for converting diesel engines to operate on ethanol is still in the developmental phase. However, there has been considerable success in utilizing 100 proof ethanol in 20% blends with diesel fuels. A system marketed by M&W Gear Company of Gibson City, Illinois, injecting the 100-proof ethanol into the engine in a turbo-charger system, has performed quite satisfactorily in initial testing by various farm groups and community colleges.

Ethanol fuel will certainly not be the only product of an alternative fuel network of on-farm and community distilleries. In the Midwest, 100 bushels of corn harvested from an acre of farmland could yield 250 gallons of ethanol and 1700 pounds of 27% protein mash. The mash can provide a key portion of a balanced diet for livestock which, in turn, can provide at least part of the fertilizer for farmers' fields or a methane digestions system. Carbon dioxide produced by fermenting mash can be captured and pumped into greenhouses (partially warmed by waste heat from the distilleries) to promote rapid plant growth. Roof-top solar collectors that would preheat water used in the distillation process could be installed in many midwest locations with corn cobs possibly providing part of the system's process energy source.

There are endless regional variations on this concept of integrating ethanol production into a broader development of farm-based alternative energy sources. In the Southwest, solar stills may prove to be more economically feasible than traditional column systems while in the Northwest, waste woods from mills could provide much of the process energy sources for distillation. Feedstocks would also differ sharply from region to region, with sweet sorghum holding considerable promise for midwest and southern regions and sugar-fodder beet hybrids for the Northwest.

The introduction of these new energy crops need not inevitably increase erosion rates. Jerusalem artichokes, for example, are a hardy perennial crop needing little tractor cultivation work. They could be planted on marginal soils unsuited for intensive annual row cropping. On other marginal lands, ethanol tree crops such as the honey locust (whose pods can be converted into ethanol and whose roots fix nitrogen in the soil) may be planted. And work in progress by agricultural researchers at the University of Wisconsin may result in the utilization of certain forage crops for the produc-

it by tripling its protein content. This high protein residue could even be dried and used as a protein supplement in foods for human consumption. In fact, a shipment of distillers' dried grain to a nation ravaged by famine would make much more sense than a shipment of unprocessed corn. The world food shortage is primarily a shortage of proteins, not starches, and ethanol production leaves the protein contents of all energy feedstocks intact.

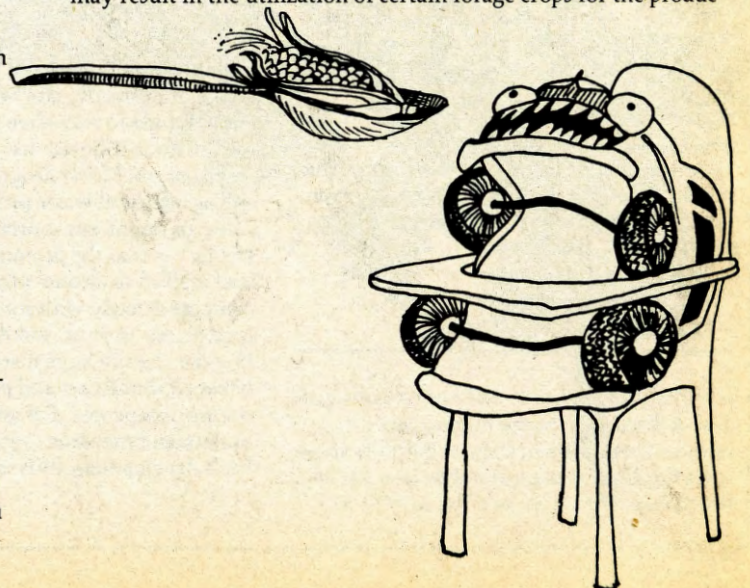
While large corporate distilleries plugged into the current petrochemical-intensive system of farming may prove to be ecologically unsound, farm- and community-based distilleries may still be integrated into balanced systems of food and energy production geared to maintain long-term soil fertility. The organizations built in the past decade to produce, process, distribute, and market organically grown foods can play a vital role in building new fuel networks in the '80s.

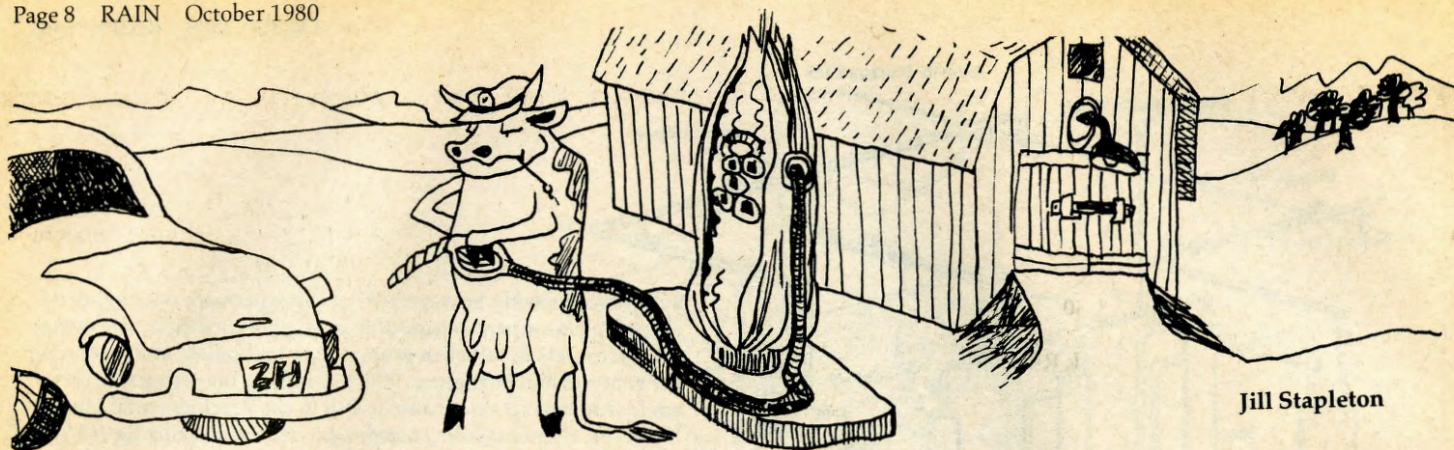
To create the skeletal outline of this network in the years ahead will be a difficult but not impossible task. The first and most important step in this process is to establish a firm connection between energy crop production and agricultural practices which maintain long-term soil fertility and minimize fossil fuel inputs.

The second step is to begin the financing of on-farm and cooperatively owned distilleries to process energy crops. This task has already begun in the Midwest where angry veterans of the farm strike movement have lent considerable financial and technical support to the construction of numerous on-farm distilleries. The A.T. community could find much more common ground in working with the farm strike movement leadership towards the creation of a decentralized, locally controlled, liquid fuel industry.

Don Smith, a national representative of the American Agriculture Movement, the loosely structured organization which spearheaded the tractorcade protests of the late 1970s, has fought hard to limit corporate control of the gasohol industry. He told the U.S. House Agriculture Committee in May of 1979 that, "We are not interested in supporting the development of a new industry for the benefit of those who already have farmers over a barrel by virtue of their superior market leverage . . . but want to see the production of alcohol fuels maintained as close to the source of basic feedstocks as possible, either on the farms or in the small rural communities . . . where participating in the ownership and operation can be broadly shared as a means of restoring economic health and viability to rural America."

In these on-farm and community distilleries, lesser proof ethanol fuels (ranging in strength from 160 to 194 proof) can be produced in direct, unblended form for tractors, trucks and automobiles. These





Jill Stapleton

cont.

tion of ethanol and a high quality protein byproduct. A research team led by Dr. K.E. Bedsen is designing processing equipment which extracts 60% of the protein from forage crops in the form of a leaf juice. The protein in the juice can be separated out and dried into a nutritious human food with leftover plant sugars ready for fermentation into ethanol.

Certain tree crops could also play a vital role in the establishment of an alternative fuel network. Fast growing eucalyptus, alder, cottonwood, and poplars can be converted via destructive distillation technologies into methanol and eventually into ethanol as the enzyme hydrolysis technologies are improved. It is these wood resources—and not the crop residues needed to maintain soil fertility—which can form an ecologically sound basis for the cellulose-based fuel industry.

The overall economics of small-scale and community-scale ethanol production look quite promising; especially when biomass process energy sources are used, stillage byproducts are fed in wet form to livestock, and distribution costs are kept to a minimum. In many cases, \$1.00 to \$1.30 a gallon production costs for 196-proof ethanol do not appear to be unreasonably optimistic. These costs are well below the costs of importing some of the higher priced mideast oils.



access

"Food or Fuel: New Competition for the World's Cropland," by Lester R. Brown, *Worldwatch Paper #35*, March 1980, \$2.00 from:

Worldwatch Institute
1776 Massachusetts Ave. N.W.
Washington, DC 20036

In a study which has already provoked a good deal of discussion in the months since its release, Lester Brown argues that "the stage is set for direct competition between the affluent minority, who own the world's 315

million automobiles, and the poorest segments of humanity, for whom getting enough food to stay alive is already a struggle." Brown believes that a carefully designed alcohol fuels program, based on forest and agricultural waste products, could become an important source of renewable fuel. His fear is that the promise of profits will lead instead to alcohol programs which will compete directly with food production, drive food prices upward, and dramatically underline the already large disparities in income between the richest and poorest segments of the world's people. For anyone seeking to understand the issues surrounding alcohol fuels development, this is important reading. —JF

Farmers who earn a substantial new income from marketing surplus ethanol may begin to find the financial breathing space needed to help them find a way off some of the more destructive petrochemical treadmills. Alternative farming techniques stressing balanced, long-term rotations, organic fertilizers, and biological pest management stand a better chance of gaining wider acceptance when farmers achieve more economic stability and are willing to take a few financial risks.

In the near term, the amount of ethanol produced by on-farm and cooperative distilleries will be small enough to be consumed primarily by farmers and a few rural residents who may choose to patronize the pump in front of their local barn or food cooperative rather than the one in front of their local Texaco.

In the long term, however, as the resource base broadens to include more cannery wastes, cheese whey, wood wastes, and even such off-beat energy sources as cattails and algae (to be cultivated in new aqua-energy farms), substantial surpluses of alcohol fuels will develop in some regions of the country. Bulk food distributors could play an important role in delivering fuels grown in an ecologically sound manner to established consumer cooperatives.

While the oil industry concentrates on gaining control of the gasoline market, the alternative fuel network should concentrate on the production and marketing of the lesser proof fuels which can be used straight in retrofitted engines. This market is, at least for the moment, small enough that it has not aroused much serious interest on the part of major oil companies.

Despite some of the more ominous trends in the emerging alcohol fuels industry detailed here, it is far too soon to issue any blanket condemnations of alcohol fuels' potential to play a key transitional role in easing the nation into a post-petroleum future. The question of the hour is not **SHOULD** these fuels be developed—but **HOW** and by **WHOM**. □□

"Alcohol Fuels," special issue of *Sun Times*, August 1980, single copies free from:

The Solar Lobby
1001 Connecticut Ave. N.W., 5th Fl.
Washington, DC 20036

If you're new to the controversies surrounding alcohol fuels development, here is an excellent primer. Among the topics discussed are the economic feasibility of alcohol fuel, net energy yield, the role of Big Oil in alcohol production and marketing, federal alcohol legislation, and the "food versus fuel" debate. If you have not previously read the *Sun Times*, you will also be introduced to a magazine with some of the best coverage around on renewable energy development and solar legislation. —JF

ENERGY

The President's Clearinghouse for Community Energy Efficiency

Suite 185
400 North Capitol St. N.W.
Washington, DC 20001
Toll free 800/424-9043

The government in all its branches publishes literally hundreds of pamphlets, booklets, flyers, etc., to inform the public about energy conservation. The President's Clearinghouse for Community Energy Efficiency has the unenviable task of keeping track of these and providing access to them for local officials and the general populace. They also attempt to track innovative community approaches to energy conservation and provide more specific information on these to inquirers. A phone call will net you a grab-bag of informative publications, a sort of sampler of what's available and current. You can rummage through them and pick ones which will most suit your needs, then order just those in bulk. Or request information on a specific topic such as heat pumps or wood burning and they can send you what they have in that subject area. This can be a very useful resource. —CC

Energy Catalog, 1980, 32 pp., \$.50 ppd., from:

Food for Thought Books, Desk R-2
325 Main Street
Amherst, MA 01002
413/253-5432

No ordinary "energy catalog" here. Rather, this mail-order book service has compiled THE BEST collection of social ecology resources I've seen anywhere. It includes over 300 succinct and sometimes critical reviews of hard-to-find classics, soon-to-be-published pieces, and listings from small presses—as well as the standard books and periodicals. Sections on ecology, energy policy and politics, and nuclear weapons are especially strong; A.T., renewable energy sources, transportation and economics are strong, too. A section on teaching materials makes this catalog particularly valuable to educators at all levels. Food for Thought has also published an excellent catalog on *Food and Agriculture* (RAIN, Feb/Mar '80). —MR

Berkshire Energy Manual, 1980, 58 pp., \$3.00 donation from:
Center for Ecological Technology
74 North Street
Pittsfield, MA 01201

I'm not convinced that it's necessary for counties to each produce their own energy manual, certainly not one so extensive as this, but this is a good "climate type" guide for any community with comparable New England weather. A simple brochure providing the "Where to Go for Assistance," "Laws, Taxes and Regulations about Energy," and "Energy Yellow Pages" specific to a county, city or large community would be useful, though, and the Berkshire Manual does a good job in that regard. It's also written in a simple, direct style, supplying valuable background as well as how-to data, and compares favorably to any federal conservation document. —CC

No Nukes Left!, \$4/4 issues, from:
P.O. Box 643
North Amherst, MA 01059
617/544-6055

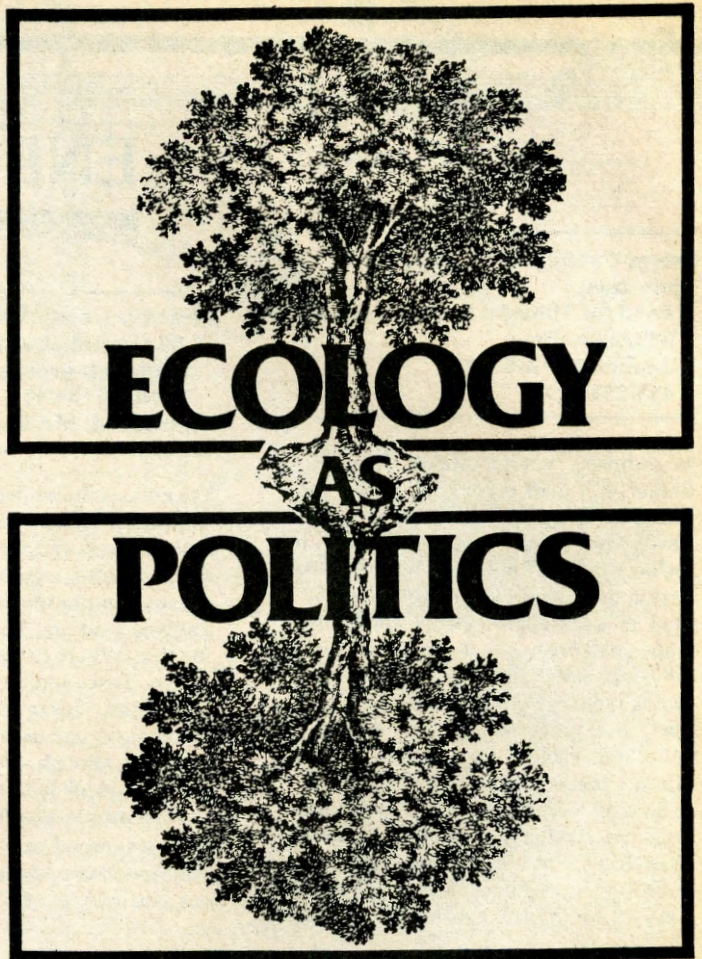
A very encouraging sign: a forum for internal political discussion and debate in the anti-nuclear movement. The first issue (Summer, 1980—\$1.25) is well designed with articles from around the country on nuclear power and weaponry, synfuels, powerlines, racism, nonviolence, utility rate hike withholding campaigns—even a song! Marcy Darnovsky's lead article, "No Nukes! Is Not Enough," provides a superb overview of the movement today:

The mystifying ideological and cultural characteristics described here—the moralism, ahistoricism, ostrich-like avoidance of conflict and the promotion of small-is-beautiful as a panacea—are dulling the radical cutting edge of the anti-nuclear movement. Its most liberatory aspects are being left behind—its challenge to the direction of capitalist production, explicitly anti-hierarchical and anti-authoritarian tone, and attempts at direct democracy.

—MR

NO NUKES
is not enough

from No Nukes Left!



***Ecology As Politics* by André Gorz, 1980, 215 pp., \$5.50 from: South End Press Box 68, Astor Station Boston, MA 02123**

Question: What do you get when you cross Karl Marx with Ivan Illich? Answer: André Gorz.

I've been waiting for this book for nearly three years. Though the French edition was originally published in 1975 and 1977, the English edition, after numerous false announcements, was not released until this summer. André Gorz is the author of, among others, *Strategy for Labor* (1967, \$3.95, from Beacon Press, 25 Beacon St., Boston, MA 02108). He is also, in the spirit of Herbert Marcuse, one of the foremost social thinkers of modern France, indeed Europe.

Three of the book's four sections are compiled from essays written between 1971 and 1976 on several environmental issues, nuclear power, medicine and health. Gorz's keenest and most original thinking, though, is in the opening section, "Ecology and Freedom."

Gorz argues, predictably, that "the ecological movement is not an end in itself, but a stage in the larger struggle" (Marx's influence). Yet he acknowledges that ecology transcends the political objectives of social-

ism (Illich's influence). The result is an argument for appropriate technology: "Socialism is no better than capitalism if it makes use of the same tools. The total domination of nature inevitably entails a domination of people by the techniques of domination."

This is accomplished via the destruction of civil society by the expanding institutions of the state (e.g., public schooling). By "civil society" Gorz means "all relations founded upon reciprocity and voluntarism, rather than on law or judicial obligation." The only way of decreasing the power of the state (and the accompanying threat of technofascism) is through the expansion of civil society. Hence his enthusiasm for ecology as politics:

"Against the centralizing and totalitarian tendencies of both the classical Right and the orthodox Left, ecology embodies the revolt of civil society and the movement for its reconstruction."

The book's epilogue concludes with some observations made during a mid-1970s trip to the U.S. Gorz describes us to his fellow citizens as follows:

. . . typical Americans start from the premise that the country belongs to them, that it will be what they make it, that it is up to them and not to the authorities to change life. The American revolution is not over.

—MR

***Political Ecology: An Activist's Reader on Energy, Land, Food, Technology, Health, and the Economics and Politics of Social Change*, edited by Alexander Cockburn and James Ridgeway, 1979, 422 pp., \$6.95 from:**

Quadrangle/The New York Times Book Co., Inc. Three Park Avenue New York NY 10016

In this case, the title really does sum it up. This is a good anthology which should be of interest to teachers as well as activists, with selections by a range of authors from Ralph Nader and George McGovern to Amory Lovins and Richard Merrill to Ivan Illich and E.F. Schumacher. It also includes Hans Magnus Enzensberger's classic essay, "A Critique of Political Ecology." Cockburn and Ridgeway conclude the book with a discussion of the horizons of political ecology:

A political ecology that does not regard as central the fact of structural unemployment must be rightly perceived as marginal or frivolous: a political ecology that does not integrate such central economic issues into its analysis and programs has failed before it begins—a victim of the same tunnel vision that has been the crippling limitation of middle-class reform-movements for the last few decades. —MR

***Economic Democracy: The Challenge of the 1980s*, by Martin Carnoy and Derek Shearer, 1980, 436 pp., \$7.95 from:**
Pantheon Books
 201 E. 50th St.
 New York, NY 10022

Economic democracy—the transfer of economic decision making from the few to the many.

You want specifics? Examples? Facts, figures, statistics, models, and theory? Well, these are your guys. Carnoy is an economist at Stanford and Shearer is, among other things, a lecturer in architectural and urban planning at UCLA, a contributing editor to *Working Papers*, and a member of the board of directors of the National Consumer Cooperative Bank. Carefully they analyze problems and potential reforms in areas such as public ownership, greater public control of investment, worker ownership, alternative technologies, and democratic economic planning. For them "the government—at all levels—is the key arena in the struggle for economic democracy."

In their penultimate chapter Carnoy and Shearer offer an alternative and optimistic view of the "me decade" seventies, suggesting that more happened and that the country is more open to change than the mainstream press would like to admit. For progressive political change to occur in the 1980s, they write, two conditions must be met: 1) Regular, working people with

families and jobs must participate directly, in varying degrees, in bringing about better lives for themselves as well as a more decent society; and 2) "The vision of economic democracy must begin to emerge as a majority viewpoint."

Building a national movement for economic democracy in the 1980s is possible, they conclude, but only if the task is clearly understood within the context of structural economic reforms. —MR

***Good Works: A Guide to Social Change Careers*, 1980, 289 pp., \$22.50, from:**
Center for the Study of Responsive Law

Dept. R
 P.O. Box 19367
 Washington, DC 20036

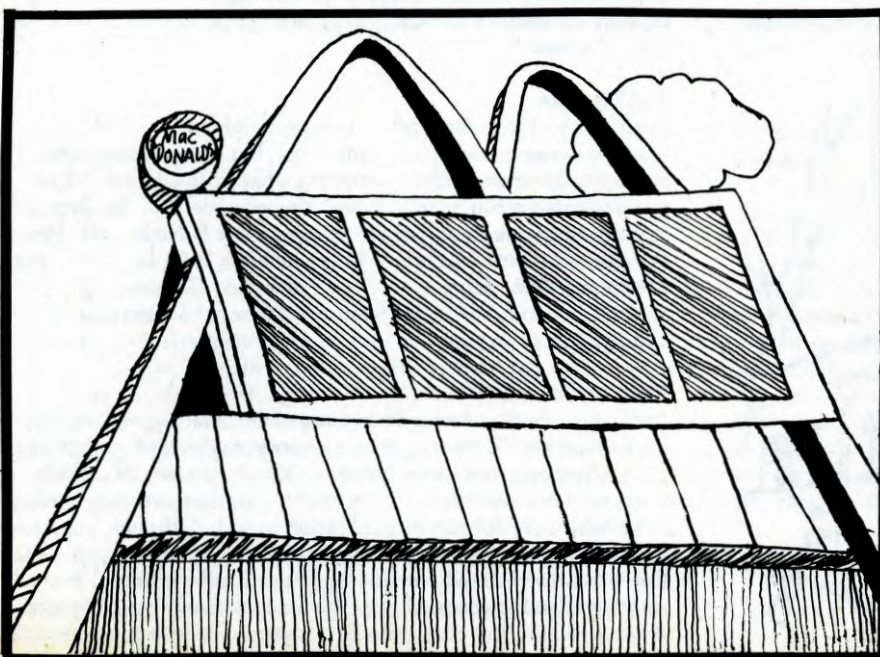
Looking for "good work"? You're not likely to find any of these public interest, self-help, social change oriented groups recruiting on your campus this semester. You'd be lucky to have a job counselor who could suggest even one such project, and here's a guide to 275 of them! Moreover, the alphabetically accessed groups are cross-referenced by state and by topic. As if that's not enough there's a basic social change reading list of the classics: Alinsky's *Rules for Radicals*, Rachel Carson's *Silent Spring*, Malcolm X's *Autobiography*, etc., and lists of networks that can refer you to the right people/programs and training schools to prepare you. Get your reference/career libraries and school counseling offices to stock it. It's invaluable! —CC

***Working Papers for a New Society*, bi-monthly, \$18/yr (\$24/yr for institutions; \$13.50/yr for students and low-income), from:**

186 Hampshire Street
 Cambridge, MA 02139
 617/547-4474

RAIN is glad to welcome *Working Papers* back into print, after nearly a year's dormancy. *Working Papers* is one of the best policy journals in the country as well as one of the best free-thinking magazines on the left. Its impressive staff and contributors have published excellent pieces on all aspects of economic and social democracy—not only analyses of existing programs and problems, but provocative ideas about what is working or might work.

The feature article of the July/August 1980 issue (\$3.00) is "Soft Energy and Hard Times" by Phil Primack: "The soft path could command wide public support if it were seen as a genuine solution to energy shortage rather than only an ethical imperative. . . . The failure to date of the soft path to attract the hard hats is not an inevitable cultural or class divide, but a failure of public policy." He cautions that "rather than leading to locally owned, innovative workplaces, the wrong kind of solar development could produce a sort of McDonalds: high technology, centralized management, decentralized production, and low pay." Some alternative that would be! —MR





Escargot On A Slug Budget

living on under \$500 a year

by Julie Summers

From 1974 through 1979 I averaged \$449.91 per year. (I don't get food stamps or welfare either.) I live comfortably, not longing for anything more money could buy. (In fact I'd spend more if there were things available that I thought would make my life better.)

I live in beautiful, peaceful surroundings, without smog, noise, hustle or bustle. I eat well. My health is good. My time is mostly my own, since I need devote little of it to earning money.

I do not live as I do because of a religion. Nor am I an ascetic, fugitive or primitivist. I live as I do because after trying various other ways (all more expensive and providing less leisure) I find my present situation gives me the most satisfaction. I'm not out to set a record for living on little money: it just happens that what I've found to be most congenial is at the same time very economical.

Food

My diet is based on grains and pulses (the edible seeds of plants having pods—peas, beans, lentils, etc.) bought minimally processed, in bulk—often 50-100 pound sacks—from wholesalers: wheat, rice, millet, corn, beans and lentils. Also alfalfa, sesame and sunflower seeds; nuts; and dried fruit. Because of perishability I buy baking yeast and oil in smaller amounts (by the gallon) at natural food stores.

I try not to be attached to any particular food. When one shoots up in price I cut down, substitute, or simply do without. E.g. when raisins were extremely high I used dates, which were less expensive. When rice was many times the price of other grains I eliminated it. Cheese is so expensive that it's now in my luxury category and I buy it infrequently.

To increase the nutritional content of my fare I sprout alfalfa and other seeds. I also buy fresh fruits and vegetables that are currently low in price, such as carrots and oranges. I buy eggs when I crave them—I may go months without any. I use meat very irregularly, perhaps on the average of once a week.

I do some foraging; mostly for berries and greens, occasionally for a squirrel.

I seldom eat out. That must save a bundle. But it's not simply a question of money: the food most restaurants serve (often reheated, highly seasoned and doused with chemicals) is not what I want to eat. Also I don't care for the waiter-patron relationship, and I don't like having to worry about my table manners.

From 1974-1979 I averaged about \$200 a year for food.

Shelter

My partner and I live in an old house trailer. Admittedly small, it's still adequate since all we want to do is live in it, not use it as a status symbol. It keeps us dry, it's easy to heat, easy to clean, and everything is within easy reach. It's also mobile so we can change scenery without much trouble.

We usually live in sub-rural, woodsy areas, trading a few hours of work a month for camping privileges.

Clothes

I don't wear any—when I can get away with it. For nasty weather, armed berry bushes and intolerant people, I cover up. Free-boxes, second hand outlets, or home industry provide most of my garments. They may not be highly fashionable but they serve the necessary functions.

Transportation

I don't have a car. I walk, ride a bike, hitch, or take the bus. (To move the trailer I borrow a vehicle.)

Maintenance

For the toaster, blender, chain-saw and electric toothbrush it's simple—since I don't have any. But I do have a bicycle, sewing machine and typewriter to contend with. I learned bike mechanics primarily through books and how to service my sewing machine by reading the owner's manual. I approach typewriter repair on a trial and error basis.

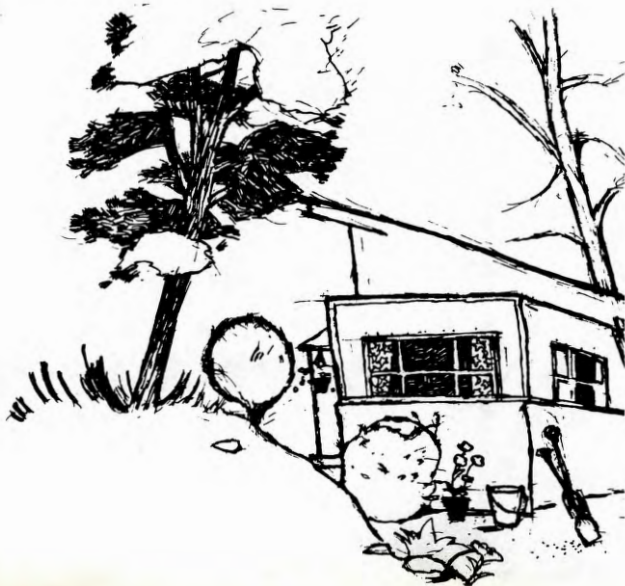
Health Care

Taking care of my own body is a more complex matter. My first line of defense is *preventative* medicine, but even so, sometimes I get sick or have an accident. Learning what to do when *that* happens, without recourse to exorbitantly priced doctors, has been difficult. Some books have helped: *Where There Is No Doctor*, David Werner, \$5.50 in '79, Hesperian Foundation, P.O. Box 1692, Palo Alto, CA 94302; *Being Your Own Wilderness Doctor*, Angier and Kodet; *First Aid Afloat*, Eastman; *Medicine for Mountaineering*; and *The Merck Manual*.

Recreation

Because my way of living does minimal *un-creating*, *re-creating* isn't called for. Or putting it another way, my everyday activities are my recreation: making bread, walking in the woods to fetch water, picking berries, bicycling, making clothes, writing, reading.

I tried a daily 30-minute meditation period. Although free, it didn't do anything for me so I gave it up. I think the reason it was a flop is because I already meditate practically all the time. I'm constantly reflecting about what I experience. I think that's important if one wishes to live economically; otherwise it's easy to get caught up in someone else's expensive follies.



Julia Suddaby



Julia Suddaby

Unnecessities

Oven (I bake on top of my wood stove in a foil-covered pan). *TV*. *Newspapers*. *Radio*. *Shampoo* (I use bar soap for hair as well as body). *Toothpaste* (I use water and elbow grease—along with my brush. A little dental pumice every few months removes stains). *Deodorant* (washing suffices, though if I'm going to be among super straight people I may rub some baking soda under my arms to bolster my self-confidence). *Hand lotion*. *Hair cuts* (and razor blades). *Pajamas*. *Aspirin* (and other palliative drugs). *Supermarkets* (of the myriad items, I purchase only meat, eggs, cheese and produce—if there's no better place to buy them). *Professionals* (I try to take care of, fix, and make things myself. To learn I read how-to books that experts have written—cheaper than buying their time on a one-to-one, face-to-face basis). *Meat every day* (once in a while is enough). *Bacon 'n' eggs* (I don't buy bacon because of additives and I use eggs only when I get a yen for them). *Desserts* (perhaps once a month; *candy* even less often). *Cavities* (I haven't had any in years—maybe I just outgrew them, or maybe it's because of good diet/proper hygiene).

A Typical Day

In winter: Mornings I used to sleep late. But now, after some years, I get up earlier, sometimes at dawn. I spend a while lying and thinking (glad my life is such that I have time for that). I lift some weights, do some exercises. Eat an orange. Read. Write. Bake bread. Have lunch—sandwich of alfalfa sprouts, buckwheat grass and homemade mayonnaise. Write and read some more, study geography, a foreign language, rap with my partner. Eat dinner—beans cooked to perfection in a pressure cooker, corn cooked along with the beans, and a raw carrot. Darkness comes and I go to bed. To converse. To think. To fantasize. To dream. In fall there are apples to pick. Juice to squeeze. Wine to make. In spring there is equipment to make and mend; wild greens to forage. Summer is time to hike, swim, travel.

The diet in that example sounded rather spartan and perhaps misleading. Actually I enjoy food very much, but I've come to derive just as much pleasure from simple dishes as from more elaborate ones. Occasionally I like and make more fancy things: pancakes, quiche, tortillas, tamale pie, cheesecake.

My activities lean heavily to the intellectual. However, there's a time and season for everything. I'm coming close to exhausting all the books I feel highly worthwhile and I expect I will become more of a naturalist as time goes on, reading nature instead of books.

So there you have my life, at least at a glance. I hope it fosters the realization that one doesn't need thousands of dollars and therefore one doesn't need to spend endless hours earning them. Think in terms of variations on a theme. There is no necessity to duplicate the details of my life to achieve the same ends. May we travel in parallel, though perhaps on different roads, towards a more joyous, peaceful world. □□

Julie lives in Philomath, Oregon.

FOOD

LAND

Dust Bowl: The Southern Plains in the 1930s, by Donald Worster, 1979, \$14.95 from:

Oxford University Press
200 Madison Avenue
New York, NY 10016

Tons of soil were swept up from the American plains and deposited as far away as Boston and Atlanta. Thousands of refugees were swept westward in the mass migration immortalized by John Steinbeck in *The Grapes of Wrath*. The creation of the Dust Bowl has been ranked as one of the worst ecological blunders in history. Who blundered and why?

In a scholarly history with the flavor of a human interest story, Worster contends that it was "the inevitable outcome of a culture that deliberately, self-consciously set itself the task of dominating the land for all it was worth." In the dozen years before the winds came, a race to mechanize plains agriculture and cash in on expanding domestic and world markets led to plowing up millions of acres which had formerly been anchored by native grasses. Conservation measures were ignored and, when the drought set in, the land lay open to erosion.

Some of the Dust Bowl's hard lessons about stewardship of the land were eventually recognized in the form of programs to establish shelterbelts of trees, restore grasslands, and utilize contour plowing. But according to Worster, the lessons were not easily accepted by middle-class farmers and merchants who had always believed that progress was inevitable and nature malleable. Their characteristic response was to "shout down nature's message with a defense of the old assumptions."

To an alarming degree, the message is still being shouted down (as recently as the mid '70s another, smaller Dust Bowl followed the plowing of several million acres of grassland to cash in on soaring grain prices), yet we continue to export our agricultural practices to the increasing numbers of the world's people who must scratch out a living in arid and semi-arid regions. In the context of world population crisis and probable unfavorable shifts in climate, the need for models of ecologically sound agricultural practice grows ever more crucial. It would be fitting, as Worster comments, if such models were to emerge on the site of the old Dust Bowl. — JF



from *Dust Bowl*

Who Owns the Earth, by James Ridgeway, 1980, 154 pp., \$8.95 from:
Collier Books
866 Third Ave.
New York, NY 10022

It is easy to take for granted the raw materials that serve our basic needs on a day-to-day basis. Easy, but not smart, since those materials are cords that bind us in consumer dependency to a few, very powerful controller/owners who have anything but our "basic needs" in mind. We have in our world economy the awesome phenomenon of vertically integrated corporations, which is to say, corporations which control virtually every aspect of an industry from production to consumption. The grain industry is a good example. It is controlled internationally by five major companies. These firms often own the elevators to store the grain; the railroad cars (and directorships in railroads), trucking fleets, port facilities and steamship lines for transport; the feed-manufacturing, milling, baking and refining facilities for processing; the fertilizer, seed companies and the land it grows on; and ultimately the banks to finance and the insurance companies to back their interests. Wars are fought (the current Mideast strategy being a handy example), governments overthrown, and whole populations subjugated to protect those interests.

Ridgeway's new book details some of the specifics, cataloging numerous raw materials and commodities. It's the sort of consumer education you're not likely to acquire elsewhere. — CC

The Wild Palate, Walter and Nancy Hall, 1980, \$7.95 paperback, from:
Rodale Press
Emmaus, PA 18049

This is an interesting and unusual cookbook full of recipes for weeds and wild animals. It is not a field guide, for it offers no advice on how to find or catch anything, but if you happen to have some arrowgrass or a muskrat sitting around, this may be the only cookbook that can tell you how to cook it. It is not a book for vegetarians—most of the recipes include meat: crockpot beaver, simmered elk tongue, etc. The recipes are based on the culinary accomplishments of a real-life wilderness forager and trapper, Barnacle Parp, who is also somewhat of a chainsaw virtuoso (*Barnacle Parp's Chain Saw Guide*, Rodale Press, 1977.) As the subtitle indicates, this is a "serious wild foods cookbook" and it deserves a place on the shelf of your wilderness cabin beside Euell Gibbons.

—Kristine Altucher

Kristine works with the Gardening Program of Responsible Urban Neighborhood Technology, a Portland-based appropriate technology group.

A Report on the Food System in Oregon: Recommendations for a State Food Policy, prepared by the Oregon Food Policy Project, 1980, from
Nutrition Information Center
239 S.E. 13th Ave.
Portland, OR 97214

This 250-page report is the outcome of a project initiated by the Oregon Food Coalition to establish a set of food principles that would "enable a comprehensive, coordinated and equitable food policy to be adopted by the State of Oregon." Well researched and written, the handbook has the potential to be a powerful and effective organizing tool on both a community and legislative level. The report is divided into six sections: Nutritional Health of Oregonians (covering basic health questions and nutritional goals); Nutrition Programs in Oregon (food assistance, educational and self-help programs); Food Industry; Agricultural Production; and Environment and Energy. Each section is full of valuable information and concludes with a series of practical recommendations—the most significant aspect of the report. While the handbook is intended primarily for Oregonians, the information and example of this unique document may be broadly applied. For Oregonians—individuals, organizations and policymakers interested in food, land use and hunger issues—this report will be invaluable.

Limited copies of this publication are currently available for sale. Prepaid orders will help assure future printings of this worthwhile resource. — LS

RESOURCES

Multifamily Urban Homesteading Bulletin, free from:
The Bulletin
 c/o The Urban Homesteading Assistance Board
 1047 Amsterdam Avenue
 New York, NY 10025

Depending on which issue of "The Bull" you read you'll find that it is published bi-monthly, quarterly, or never again, since its budget from HUD was slated to run out June 1980. With its current status hopeful, I highly recommend it as perhaps the only journal covering the nuts and bolts of cooperative urban homesteading. Each issue combines technical assistance (from how to package a Section 312 loan financing program, to methods of retrofitting multifamily buildings) with reports to update existing models. There are pull-out sections on specifics and reviews and news to keep you current. The price is right! —CC

People Power: What Communities Are Doing to Counter Inflation, 1980, 410 pp., free from:

Consumer Information Center
 Dept. 682-H
 Pueblo, CO 81009.

Neighborhoods: A Self-Help Sampler, 1979, 161 pp., \$5.50 from:
Superintendent of Documents
U.S. Govt. Printing Office
 Washington, DC 20402
 S/N 023-000-00559-0

Maybe someday the federal government will figure out how to communicate between branches to reduce the sort of overlap evidenced in these two documents. Knowing how they operate, you can bet an enormous amount of time, energy and money went into each of these publications and with a little coordination a combined effort could have eliminated both redundancy and areas where one or the other is thin. They each aim to involve more mainstream Americans in the work of improving communities and reducing the impact of inflation. They each present numerous groups and projects by issue area (food, health, energy, housing, etc.) and the resources in both public and private sectors that the groups access to serve their communities. Each has extensive, *very* useful appendices (neither is as well cross-referenced as *Good Works* — see Access this issue). The lessons of both are similar: grass roots organizations tend to produce tremendous results with few dollars; they are becoming more sophisticated—drawing to-

gether larger, more skilled coalitions of people to confront more complex social and economic scenarios; and they rely a great deal on each other's examples and support through regional and national networks.

The books provide the linkages between analysis of problems and solutions to them. They serve like phone books, to put you in touch with other people doing what needs to be done. They are equally good. *People Power*, with more extensive examples (and free) is your best bet. —CC

"Special Hotline Issue," *The Information Report*, Vol. 6, No. 4, July/Aug., 1980, 8 pp., \$5.00, from:

Washington Researchers
 918 16th St. N.W.
 Washington, DC 20006
 Subscriptions \$24/yr

The bimonthly *Information Report* is one of those handy periodicals that access public reference materials. It's the sort of guide that can walk you through much of the Washington bureaucracy, and if you happen to be a researcher with an eye on the federal government, you'll want to see it regularly. This special "Hotline Issue" is particularly useful, listing nearly 200 phone numbers (about 50 of them toll free) for government offices, department news recordings, free research assistance, national statistics, and more. —CC



from *People Power*

A Possible Utopia

by André Gorz

November 4, 1980. The last major election til 1984. You know you don't want Reagan running the show. Carter and his Trilateral Commission buddies are hardly more inspiring, and Anderson, another Trilateral Commissioner, is supposed to represent the "alternative." What's left?

Some people will vote for the Citizen's Party, others for the Socialists or the Libertarians or other "minor" parties. And a lot of people just ain't gonna vote in the presidential race, at least not for anyone. Voting against someone isn't impossible, but how do you vote against all of them? Most Europeans can vote "No Confidence." Americans cannot. The pollsters will tell us it's apathy, but we know it's protest. What's left?

André Gorz is left, and represents a long-awaited merging of the struggle for democratic socialism with the attempt to create an ecological society, offering new vitality to people in both movements. This excerpt illustrates several key ideas in Gorz's *Ecology As Politics* (see review this issue). None of the presidential contenders, major or minor, have a program as appealing as the one you're about to read.

The setting: France. The time: the first days of the new administration. Let's hope it happens here someday soon.

—MR

When they woke up that morning, the citizens asked themselves what new turmoil awaited them. After the elections, but during the period of transition to the new administration, a number of factories and enterprises had been taken over by the workers. The young unemployed, who for the previous two years had been occupying abandoned plants in order to engage in "wildcat production" of various socially useful products, were now joined by a growing number of students, older workers who had been laid off recently, and retired people. In many places, empty buildings were being transformed into communes, production cooperatives, or "alternative schools." In the schools themselves, the older pupils were taking the lead in practicing skills for self-reliance and, with or without the collaboration of the teachers, establishing hydroponic gardens and facilities for raising fish and rabbits; in addition, students were beginning to install equipment for woodworking, metalworking, and other crafts which had for a long time been neglected or relegated to marginal institutions.

The day after the new government came into office, those who set out for work found a surprise awaiting them: during the night, in most of the larger cities, white lines had been painted on all the major thoroughfares. Henceforth these would have a corridor reserved for buses, while on the side streets similar corridors were set aside for bicyclists and motorcyclists. At the major points of entry to each city, hundreds of bicycles and mopeds were assembled for use by the public, and long lines of police cars and army vans supplemented the buses. On this morning, no tickets were being sold or required on the buses or suburban trains.

At noon, the government announced that it had reached the decision to institute free public transportation throughout the country, and to phase out, over the next twelve months, the use of private automobiles in the most congested urban areas. Seven hundred new tramway lines would be created or reopened in the major metropolitan centers, and twenty-six thousand new buses would be added to city fleets during the course of the year. The government also announced the immediate elimination of sales tax on bicycles and small motorbikes, thus reducing their purchase price by twenty percent.

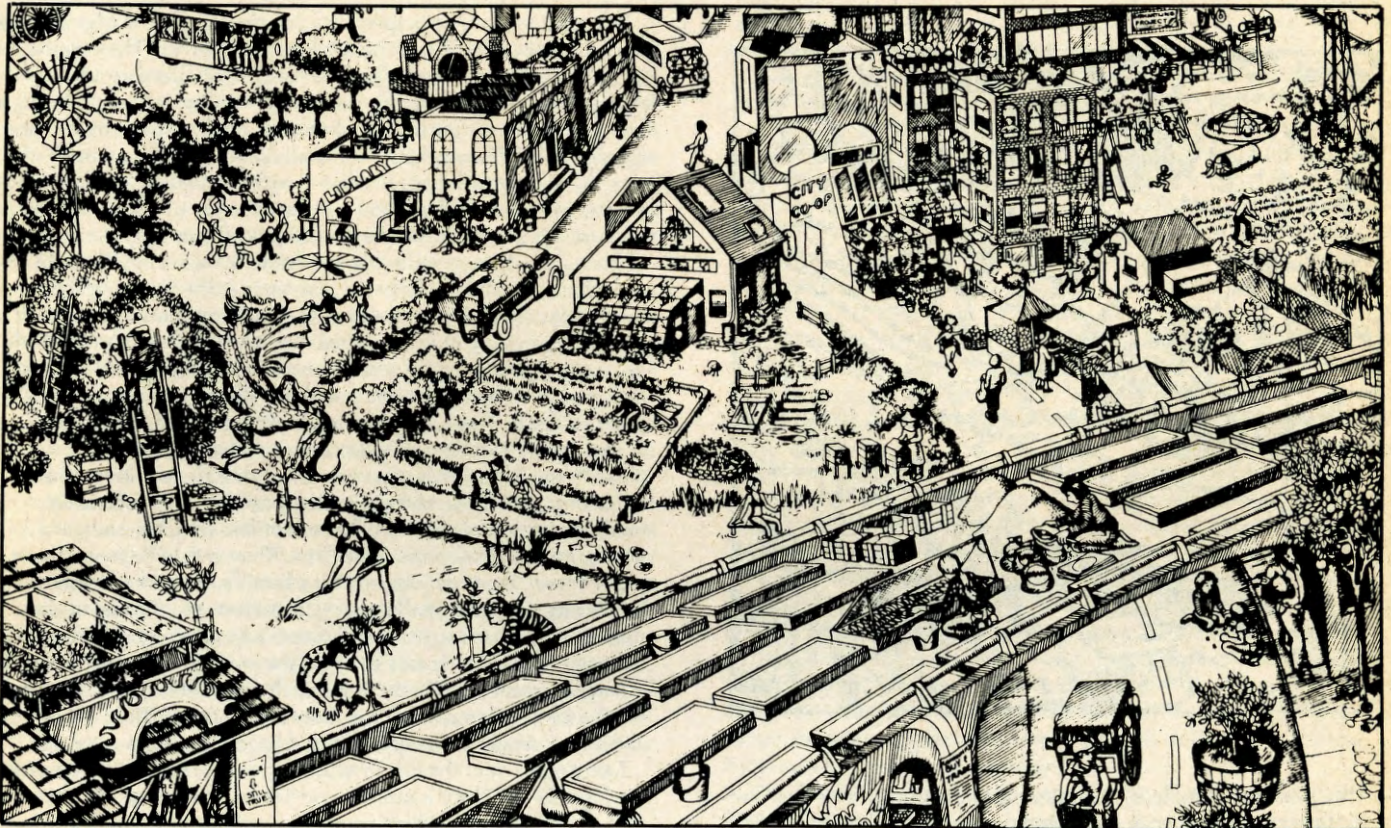
"We have earned," the President concluded, "The right to free work and to free time . . ."

That evening, the President of the Republic and the Prime Minister went on nationwide television to explain the larger design behind these measures. Since 1972, the President said, the GNP per person in France has reached a level close to that of the United States—the difference varying between five and twelve percent according to the fluctuations in the value of the franc, which has been notoriously undervalued. "Indeed, my fellow citizens," the President concluded, "we have nearly caught up with the U.S. But," he added soberly, "this is not something to be proud of."

The President reminded his listeners of the period, not so distant, when the standard of living of Americans seemed an impossible dream to French men and women. Only ten years ago, he recalled, liberal politicians were saying that once the French worker began earning American wages, that would be the end of revolutionary protests and anticapitalist movements. They had been, however, profoundly mistaken. A large proportion of French workers and employees were now receiving salaries comparable to those being paid in the U.S. without this having diminished the level of radical activism. "On the contrary. For in France, as in the United States, the people find themselves having to pay more and more to maintain an increasingly dubious kind of well-being. We are experiencing increasing costs for decreasing satisfactions. Economic growth has brought us neither greater equity nor greater social harmony and appreciation of life. I believe we have followed the wrong path and must now seek a new course." Consequently, the government had developed a program for "an alternative pattern of growth, based on an alternative economy and alternative institutions." The philosophy underlying this program, the President stated, could be summed up in three basic points:

1. **"We shall work less."** Until now, the purpose of economic activity was to amass capital in order to increase production and sales, and to create profits which, reinvested, would permit the accumulation of more capital, and so on. But this process must inevi-

“...the government's vocation is to abdicate into the hands of the people.”



from *Stepping Stones* Poster by Diane Schatz

tably reach an impasse. Beyond a certain point, it could not continue unless it destroyed the surplus which it had created. "We have reached that point today," the President said. "It is, in fact, only by wasting our labor and our resources that we have managed in the past to create a semblance of the full employment of people and productive capacities."

In the future, therefore, it was necessary to consider working less, more effectively, and in new ways. He said that the Prime Minister would spell out the details of proposed measures for change in this direction. Without going into them, the President nevertheless stated that they would give substance to the following principle: "Every individual will, as a matter of right, be entitled to the satisfaction of his or her needs, regardless of whether or not he or she has a job." He argued that once the productive machinery reaches the level of technical efficiency where a fraction of the available workforce can supply the needs of the entire population, it is no longer possible to make the right to a full income dependent on having a full-time job. "We have earned," the President concluded. "the right to free work and to free time."

2. **"We must consume better."** Until now, products had been designed to produce the greatest profit for the firms selling them. "Henceforth," the President said, "they will be designed to produce the greatest satisfaction for those who use them as well as for those who produce them."

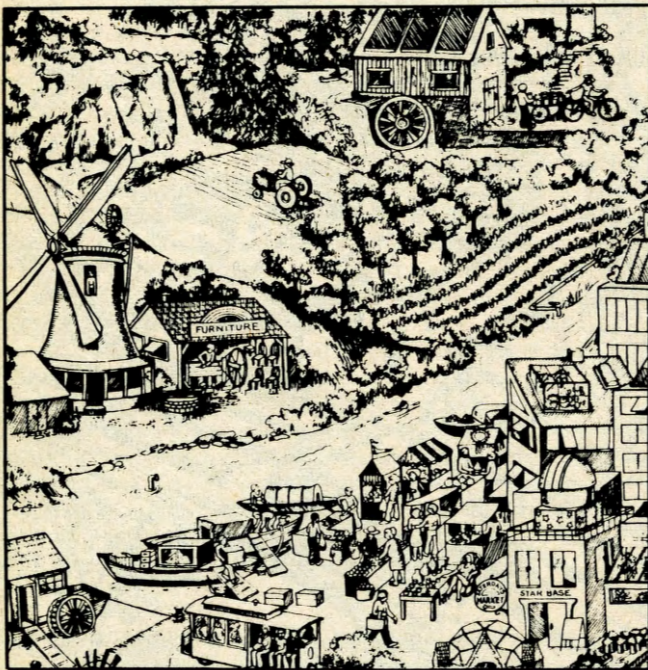
To this end, the dominant firms in each sector would become the property of society. The task of the great firms would be to produce, in each area, a restricted number of standardized products, of equal quality and in sufficient amounts, to satisfy the needs of all. The design of these products would be based on four fundamental criteria: durability, ease of repair, pleasantness of manufacture, and absence of polluting effects.

The durability of products, expressed in hours of use, would be required to appear alongside the price. "We foresee a very strong foreign demand for these products," the President added, "for they will be unique in the world."

3. **"We must re-integrate culture into the everyday life of all."** Until now, the extension of education had gone hand in hand with that of generalized incompetence.

continued...

Utopia continued



Thus, said the President, we unlearned how to raise our own children, how to cook our own meals and make our own music. Paid technicians now provide our food, our music, and our ideas in pre-packaged form. "We have reached the point," the President remarked, "where parents consider that only state-certified professionals are qualified to raise their children adequately." Having earned the right to leisure, we appoint professional buffoons to fill our emptiness with electronic entertainment, and content ourselves with complaining about the poor quality of the goods and services we consume.

It had become urgent, the President said, for individuals and communities to regain control over the organization of their existence, over their relationships and their environment. "The recovery and extension of individual and social autonomy is the only method of avoiding the dictatorship of the state."

The President then turned to the Prime Minister for a statement of the new program. The latter began by reading a list of twenty-nine enterprises and corporations whose socialization would be sought in the National Assembly. More than half belonged to the consumer goods sector, in order to be able to give immediate application to the principles of "working less" and "consuming better."

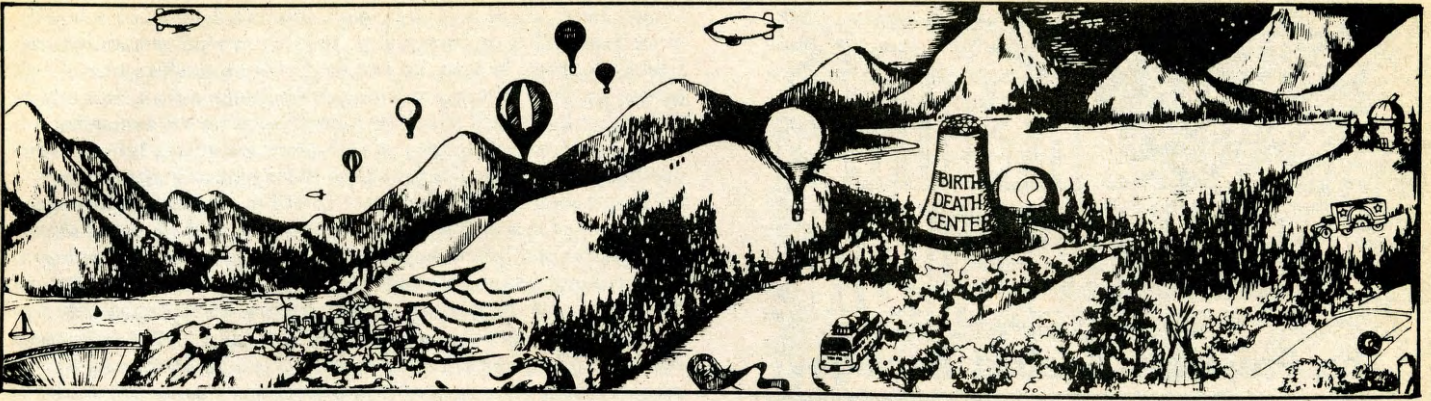
To translate these principles into practice, the Prime Minister said it was necessary to rely on the workers themselves. They would be free to hold general assemblies and set up specialized groups, following the system devised by the workers of Lip, where planning is done in specialized committees, but decisions are taken by the general assembly. The workers should allow themselves a month, the Prime Minister estimated, to define, with the assistance of outside advisers and consumer groups, a reduced range of product models and new sets of quality standards and production targets.

During this first month, said the Prime Minister, production work should be done only in the afternoons, the mornings being reserved for collective discussion. The workers should set as their goal the organizing of the productive process to meet the demands for essential goods, while at the same time reducing their average worktime to twenty-four hours a week. The number of workers would evidently have to be increased. There would, he promised, be no shortage of women and men ready to take these jobs.

The Prime Minister further remarked that the workers would be free to organize themselves in such a way that each individual could, for certain periods, work more or less than the standard twenty-four hours for the same firm. They would be free to have two or three part-time jobs, or, for example, to work on construction during the spring and in agriculture towards the end of the summer—in short, to learn and practice a variety of skills and occupations. To facilitate this process, the workers themselves would be helped to set up a system of job exchanges, taking into account that the 24-hour week, and the monthly salary of 2000F (\$500) to which they would be entitled, should be regarded as an average.

Two people, said the Prime Minister, should be able to live quite comfortably on 2000F a month, considering the range of collective services and facilities which would be available to them. But no one need feel restrained by this: "Luxuries will not be prohibited. But they must be obtained by additional work." As examples, the Prime Minister cited the following: a secondary residence or summer cottage represented about three thousand hours of labor. Anyone seeking to acquire one would work, in addition to the twenty-four hours a week, three thousand hours in the building and construction sector, of which at least a thousand hours would need to be completed before a loan could be raised. Other objects classified as nonnecessities, such as private automobiles (which represented about six hundred hours of labor), could be acquired in the same fashion. "Money itself will no longer confer any rights," the Prime Minister stated. "We must learn to determine the prices of things in working hours." This labor cost, he added, would rapidly decline. Thus the individual with some do-it-yourself skills would soon be able to acquire, for only five hundred hours of additional work, all the elements needed to assemble his or her own house, which should not take more than fifteen hundred hours to put up.

The government's economic aim, the Prime Minister stated, was to gradually eliminate commodity production and exchange by de-



centralizing and scaling down production units in such a way that each community was able to meet at least half of its needs. The source of the waste and frustration of modern life, the Prime Minister noted, was that "no one consumes what he or she produces and no one produces what he or she consumes."

As a first step in the new direction, the government had negotiated with the bicycle industry an immediate thirty percent increase in production, but with at least half of all the bicycles and motorcycles being provided as kits to be put together by the users themselves. Detailed instruction sheets had been printed up, and assembly shops with all the necessary tools would be installed without delay in town halls, schools, police stations, army barracks, and in parks and parking lots . . .

The Prime Minister voiced the hope that in the future local communities would develop this kind of initiative themselves: each neighborhood, each town, indeed each apartment block, should set up studios and workshops for free creative work and production; places where, during their free time, people could produce whatever they wished thanks to the increasingly sophisticated array of tools which they would find at their disposal (including stereo equipment or closed-circuit television). The 24-hour week and the fact that income would no longer depend on holding a job would permit people to organize so as to create neighborhood services (caring for children, helping the old and the sick, teaching each other new skills) on a cooperative or mutual-aid basis, and to install convenient neighborhood facilities and equipment. "Stop asking, whenever you have a problem, 'What is the government doing about it?'" the Prime Minister exclaimed. "The government's vocation is to abdicate into the hands of the people."

"Economic growth has brought us neither greater equity nor greater social harmony and appreciation of life."

The cornerstone of the new society, the Prime Minister continued, was the rethinking of education. It was essential that, as part of their schooling, all young people learn to cultivate the soil, to work with metal, wood, fabrics, and stone, and that they learn history, science, mathematics, and literature in conjunction with these activities.

After completing compulsory education, the Prime Minister went on, each individual would be required to put in twenty hours of work each week (for which he or she would earn a full salary), in addition to continuing with whatever studies or training he or she

desired. The required social labor would be done in one or more of the four main sectors: agriculture; mining and steelworks; construction, public works, and public hygiene; care of the sick, of the aged, and of children.

The Prime Minister specified that no student-worker would, however, have to perform the most disagreeable jobs, such as collecting garbage, being a nurse's aide, or doing maintenance work, for more than three months at a time. Conversely, everyone up to the age of forty-five would be expected to perform these tasks for an average of twelve days a year (12 days a year could mean one day per month or one hour per week). "There will be neither nabobs nor pariahs in this country any more," he remarked. In a matter of two years, six hundred multi-disciplinary centers of self-learning and self-teaching, open day and night, would be put within easy reach of everyone, even of people living in rural areas, so that no one would be imprisoned in a menial occupation against his or her choice.

The student-workers would also be expected, during their last year of work-education, to organize themselves into small autonomous groups to design and carry out an original initiative of some kind, which would be discussed beforehand with the local community. The Prime Minister expressed the hope that many of these initiatives would seek to give new life to the declining rural regions of France, and serve to reintroduce agricultural practices more in harmony with the ecosystem. Many people, he said, were unduly worried by the fact that France depends on foreign sources for gasoline and industrial fuel, when it was far more serious to be dependent on American soybean meal to raise beef, or on petrochemical fertilizers to grow grains and vegetables.

"Defending our territory," the Prime Minister said, "requires first of all that we occupy it. National sovereignty depends first of all on our capacity to grow our own food." For this reason the government would do everything possible to encourage a hundred thousand people a year to establish themselves in the depopulated regions of the country, and to reintroduce and improve organic farming methods and other "soft" technologies. All necessary scientific and technical assistance would be provided free for five years to newly established rural communities. This would do more to overcome world hunger, he added, than the export of nuclear power stations or insecticide factories.

The Prime Minister concluded by saying that, in order to encourage the exercise of imagination and the greater exchange of ideas, no television programs would be broadcast on Fridays and Saturdays. □□

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REFUSE RESURRECTION

The Prejudice Against Salvage

by Daniel Knapp

The "out of sight, out of mind" ethic is powerfully reinforced in many areas by regulations that prohibit or discourage salvage. It is difficult to understand why this should be so, since prevention of salvage operates to reduce local employment, increase waste flows, shorten the working life of landfills, destroy or lock up embodied energy contained in materials, and guarantee contamination of everything with everything else. Valuable resources are destroyed, and the people are taxed to pay for it.

At the level of the dump, the prohibition is not usually supported with a list of reasons. Instead, what people see is a sign saying "No Salvage." It is obvious that there is no point in asking questions of a sign, and for most people the sign is enough to prevent further inquiry. Those who take the time to find out may discover that the prohibition is backed by a local ordinance, which can be looked up in the county or city code. But finding the legal backing still doesn't explain the prohibition; laws are not reasons, after all. The matter becomes more perplexing still when it is remembered that the old-time pattern was to salvage everything that could be salvaged before burning and eventually covering the remainder. The small dump with a local, often resident operator was the normal ultimate disposal system before the current era of extensive regulation and solid waste bureaucratization. Thus it is tempting to look outside the localities for the source of pressure to prohibit salvage and to conclude that, left to themselves, local populations act to minimize waste.

Working at or near landfills and talking with the people who use them reinforces this idea. Again and again, you hear someone say: "Now why would anyone want to throw *that* away!" Where salvage and picking is allowed, moreover, a salvage worker soon learns that he or she can set materials aside for recycling or resale with an 80-90% chance for cooperation and compliance. Most people are glad to see the materials saved from destruction; they do not like the idea of being forced to waste things, and they adapt quite readily to changed circumstances that permit more aggressive recycling and salvage. If people gain employment and solid waste disposal costs are reduced, so much the better!

The United States Environmental Protection Agency publishes hundreds of titles on solid wastes, and many on landfills, but there is nothing on landfill salvage. There is an eight-volume matched set of books, available free and complete with flowcharts and engineered systems layouts for a variety of proprietary mechanized "resource recovery" plants, including prominent mention of manufacturer's trade names, but there is no manual for setting up front-end recycling at a landfill or transfer station, no review of tools and technology for "surface-mining," no model contracts with local producer co-ops or small recycling contractors.

Most of the EPA's material that does relate to salvaging is oriented to marketing, not collection, and often the "salvage" referred to is machine processing of mixed wastes, not metals high-grading or wood salvage or soils reclamation. And so, although landfill salvage and scavenging has never died out entirely in the

United States, there is no systematic acknowledgement that it still exists as a practice or a possibility, and there are no operational statistics, no design reviews, no case studies of successful enterprises—in short, there is an informational void in the EPA's otherwise voluminous field of information on solid wastes management.

Sanitary Landfill Design and Operation is the basic how-to manual that EPA's Office of Solid Waste Management uses to spread the gospel about approved sanitary landfilling practices. Most of the book is aimed at speedy and efficient disposal, with drawings showing a variety of different burial techniques, photos of compacting and spreading equipment, and even such details as dosage rates for pesticides to kill off insects and make the landfill that much more "sanitary." The booklet has been available since 1972, and has been reprinted at least once. Total distribution is unknown, but it is probably fairly concentrated among solid waste and public works officialdom in city and county administrations across the country.

Sanitary Landfill Design and Operation does not deviate much from the apparent reluctance of USEPA to give landfill salvage its due: there is less than half a page on the subject, and there are no illustrations at all.

Far worse than the lack of mention, though, is the misinformation, ignorance, and sheer prejudice that the authors manage to convey in the few short paragraphs where salvage is mentioned. Almost everything they say about the subject is questionable, wrong, or self-contradictory.

The section on "Salvage and Scavenging" is the last in the chapter on Landfill Operation, right after "Fires." It is worth quoting, and critiquing, in full.

Salvaging usable materials from solid waste is laudable in concept, but it should be allowed only if a sanitary landfill has been designed to permit this operation, and appropriate processing and storage facilities have been provided. (p. 38)

The authors do not tell us where to go to see an acceptably designed salvaging facility, however, nor do they give us any guidance in deciding what "appropriate processing and storage facilities" might be like. We already know from an examination of EPA titles on solid waste that there is no other publication, manual, or guide available.

Scavenging, sorting through wastes to recover seemingly valuable items, must be strictly prohibited. (p. 38)

Why use the diminutive word "seemingly" to qualify valuable items? Experience shows that even minimal labor-intensive front-end recycling systems at moderate-sized landfills (250-300 tons per day) can generate revenues of \$5,000 to \$8,000 per month with virtually no capital investment. Monthly tonnage diversions can be as high as 150 or more, and considering that white goods (stoves, refrigerators, etc.), metals in general, structural lumber, firewood-sized logs, rugs and furniture, etc., are among the most difficult wastes to push and compact as well as the most desirable and dependable producers of revenue, the overall positive impact of large-scale front-end recycling on the operations of the landfill could be very significant. Admittedly, sorting through mixed wastes does not sound like a very palatable job, but in practice it's not all that bad, and certainly it is never boring. Besides, there are cleaner alternatives that can minimize the need to hand-sort mixed wastes. The most obvious is the use of a buy-back or reduced-charge system within the landfill to monetarily reward effective recycling behavior, coupled with a program to teach the public to use source-separation procedures and systems.

All salvage proposals must be thoroughly evaluated to determine their economic and practical feasibility. Salvaging is usually more effectively accomplished at the point where waste is generated or at specially-built plants. (p. 38)

Here again, something is given, but even more is taken away. Anyone who wants to salvage will have to write a proposal, but no criteria are given to judge "economic and practical feasibility," no suggestions offered on how to conduct a fair and open competition for salvage rights. The next sentence is prejudicial and ignorant of reality: it is precisely because source separation is *not* effectively practiced at the point of waste generation that landfill salvage becomes necessary as a last resort.

We are left with the conclusion that, though proposals may be written, they will always compete at a disadvantage with an imagined salvage facility located somewhere other than a landfill. This is a formula for frustration and burnout of people who are working toward more effective and complete recycling systems at landfills.

The capital and operating costs of salvage operations at a disposal site are usually high, even if it is properly designed and operated. (p. 38)

This is completely false. Capital and operating costs can be as little as a bag of tools for separating materials, and a piece of the landfill's surface for storage of bins and barrels. Materials buyers will often supply and service larger containers in exchange for a contract to buy the materials that are collected. And for second-hand sales, not even the tools or containers are necessary, only the surface for temporary storage and a place for the customers to park while they shop. People love bargains, and they like the unexpected find; experience shows that very significant tonnage diversions are possible with absolutely minimal capital.

It is also true that the most elaborate and complete front-end recycling system imaginable would cost only a fraction of what a garbage-to-energy plant costs, and may even cost less than the equipment necessary to run an efficient sanitary landfill, especially when long-term operating and maintenance costs are factored in. So it is just not true that capital costs for scavenging are high; quite the opposite is the case.

Without front-end salvage and recycling, people are put in the position of a cat or dog that is kept indoors and not given a litter box: sooner or later pollution of living space is inevitable.

Scavengers are too intent on searching to notice the approach of spreading and compacting equipment, and they risk being injured. Moreover, some of the items collected may be harmful, such as food waste, canned or otherwise; these items may be contaminated. Vehicles left unattended by scavengers interfere with operations at the fill. (p. 38)

This section is insulting to the intelligence of both the scavenging profession and the reader. Spreading and compacting equipment is large, noisy, intrusive, and easily avoided when its drivers are not being coached to destroy salvageable items "immediately . . . to keep them off the market." Equipment operators can be trained to work safely around scavenging activities, just as they learn to avoid running over workers at construction sites. Parking spaces can be provided for workers' cars. Bright and protective clothing can be worn.

If these writers want to say something about landfill safety, they should try explaining why by far the most frequent and serious accidents occurring at landfills result from vehicles and people falling into the disposal pit. It is the landfill *design* which is responsible for the most accidents.

Besides the mitigating measures described above, it is also true that landfill salvage work is insurable, just as is any other form of labor in the American economy. The question of who is liable for accidents can be dealt with through normal procedures for occupations of comparable hazard. Management and incentives can be contracted for, job descriptions and standard operating procedures outlined. There do not seem to be any major management or organizational obstacles standing in the way of landfill salvage.

None, that is, unless you count utterly hostile and misinformed statements such as the ones just critiqued. And objections from the USEPA can be formidable, particularly in areas used to receiving substantial amounts of federal money. Local administrations are quick to fall into line with what they take to be official federal thinking when they believe their grants and subsidies may be held up because their sanitary landfill or sewage disposal facilities are not operating in the approved manner.

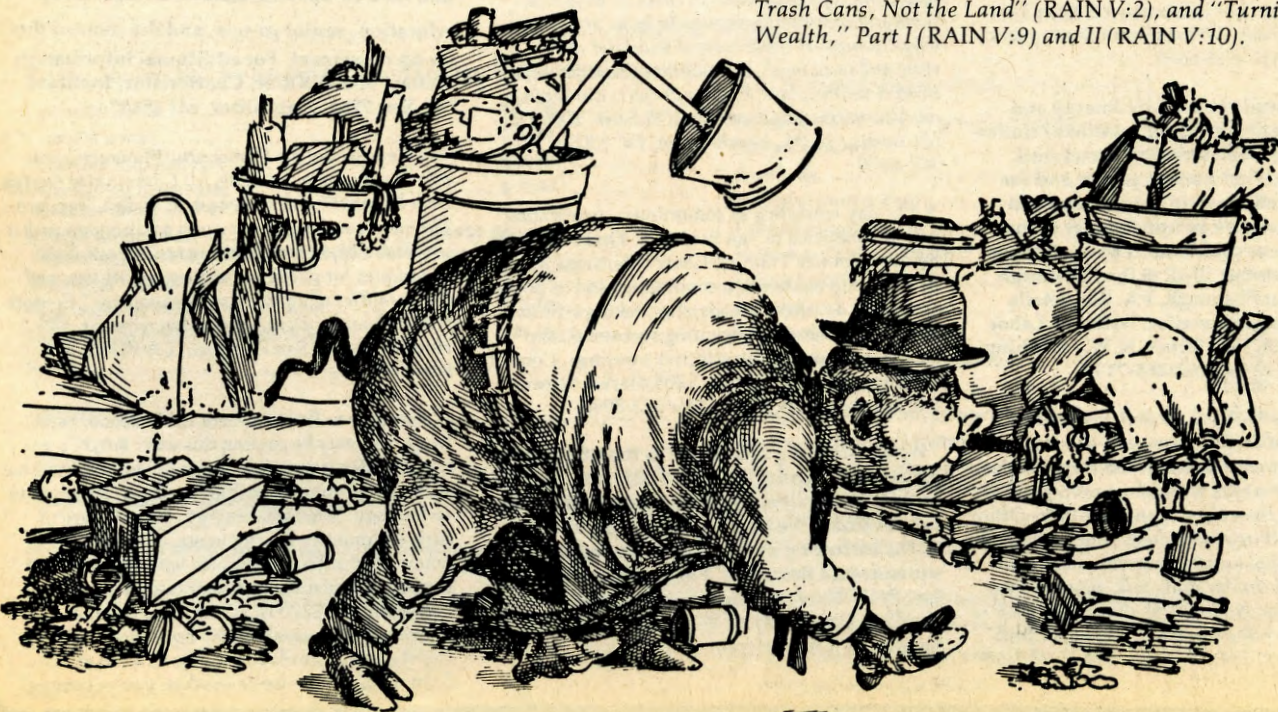
As a further point in favor of the conclusion that the USEPA is hostile to and prejudiced against landfill salvage, consider the fact that nowhere in the discussion is there any mention of the very considerable and immediate flow of revenue that can begin when the landfill is turned into a marketplace instead of an arena for disposal. This, and the consequent lack of discussion of how to manage the potential revenue flow, is one of the most serious and flagrant omissions in a generally discouraging and dispiriting approach to the most workable known form of resource recovery at sanitary landfills. □□

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Available Information Materials on Solid Waste Management: Total Listing, 1966 to 1978. Office of Solid Waste, USEPA, 1979. Catalog SW-58.29.

Dirk R. Brunner and Daniel J. Keller, *Sanitary Landfill Design and Operation.* SW-65ts, Stock Number 5502-0085, USEPA. Second Printing, November 1977.

Dan Knapp, formerly with Oregon Appropriate Technology in Eugene, is now a professional scavenger in Berkeley, California, and has set up a \$2000-a-month non-ferrous and second-hand operation at the Berkeley landfill. See also Dan's articles "Mine the Trash Cans, Not the Land" (RAIN V:2), and "Turning Waste Into Wealth," Part I (RAIN V:9) and II (RAIN V:10).



Carol Forbes, Director of the USDA Farm Women's Project, will be the featured speaker at the Demeter Conference for Northwest Women in Agriculture to be held November 14-16 in Ellensburg, Washington. Workshops will center around such subjects as integrating animals and crops, basic plumbing skills, land trusts, farming on the urban rim, and urban homesteading. Registration deadline is October 15. For registration brochure, write Barbara Snyder, Tilth, 13217 Mattson Road, Arlington, WA 98223. For additional information call Louise Dix at 206/625-4764.

The Fifth National Passive Solar Conference will be held October 19-26 in Amherst, Massachusetts. The event will incorporate special side conferences, including one on "Women in Solar Energy" and the First National Passive Solar Design Awards. For details and registration information contact Passive Solar 1980, Box 778, Brattleboro, VT 05301 802/254-221.

The Interfaith Center on Corporate Responsibility, associated with the National Council of Churches, is looking for a person to serve as coordinator for its energy program. The coordinator will conduct research on energy issues, analyze data and materials, and make recommendations for church corporate responsibility action on each of the issues. Other duties include fundraising from churches and foundations for the energy program and preparation of constituency education programs. For details contact Timothy Smith, Executive Director, ICCR, Room 566, 475 Riverside Drive, New York, NY 10115, 212/870-2293.

The Fourth Annual New Earth Exposition will open October 17 and extend over two weekends at Fort Mason Center in San Francisco. The event will highlight innovations in alternative energy and transportation, natural foods, wilderness skills, and ecology. For information contact Toni Garrett or Stan Politi, 2990 Seventh Street, Berkeley, CA 94710, 415/848-6860.

The Labor Committee for Safe Energy and Full Employment is holding a national conference to provide trade unionists concerned about the dangers of nuclear power and the lack of democratic control over energy and employment policies an opportunity to meet and address these problems. The conference will be held October 10-12 at the Pittsburgh Hilton Hotel, in Pittsburgh, PA. For details and registration information write the Labor Committee, 1536 16th Street, N.W., Washington, DC 20036, or call 202/265-7190.

The Chautauqua Institute for Self-Reliance, which produces a daily information-sharing radio program for southeastern Ohio and West Virginia focusing on appropriate technology concepts, has received a grant from the Consumer Affairs Office of DOE to train thirty individuals from around the country who would be willing to volunteer their time to establish similar radio talk shows in their own communities. No previous radio experience is required. If interested contact Chautauqua Institute, Route 1, Box 234, Millfield, OH 45761, 614/594-6628.



Six community business training courses will be held in Philadelphia, November 10-14. Courses available include: Community Economic Development Strategies; Financial Development; Organizing to Protect and Develop Your Community; Starting a Business; Democratic Management; and Conversion to Worker Ownership. Co-sponsors are the New School for Democratic Management, the Delaware Valley Federation for Economic Democracy, and the Institute for the Study of Civic Values. For further information contact Bob Kaplan, ISCV, 401 N. Broad Street, Room 810, Philadelphia, PA 19108, 215/922-8960.

The University of Alaska in Fairbanks will be the site of the Second Alaska Alternative Energy Conference, October 8-12. The conference, which is sponsored by the Alaska Alternative Energy Resource Center, will focus on cold climate applications of alternative technologies, including passive solar design, wind generator maintenance, methane and fuel alcohol production, conservation, and alternative waste management. Contact Alaska Alternative Energy Resource Center, 1069 West Sixth Avenue, Anchorage, AK 99501, 907/274-3621.

Alternative state and local energy policies will be the theme of a conference to be held in Austin, Texas, December 11-13. The event will bring together state and local energy officials, policy analysts, and representatives of citizens' organizations and community groups to focus on specific ways to support conservation and solar at the state and local level. For additional information contact Becky Glass, Energy Project, Conference on Alternative State and Local Policies, 2000 Florida Avenue N.W., Washington, DC 20009, 202/387-6030.

A five-day workshop in community organization will be conducted in San Francisco, October 23-27, by the Organize Training Center. Participants will be trained in analyzing a community and its power structure, developing leadership, taking effective action on issues, implementing successful campaigns, and conducting effective meetings. Contact Organize Training Center, 1208 Market Street, San Francisco, CA 94102, 415/552-8990.

"Who's Minding the Coast" is the title of a conference/exhibition/film festival to be held in Seattle, October 17-18. Purpose of the event is to examine the coast and its future to 2000 A.D., including its relationship to adjacent uplands and the ocean. For information contact Polly Dyer, Institute for Environmental Studies, University of Washington, FM-12, Seattle, WA 98195, 206/543-1812.

A training program in handling the law-related problems of older persons will be conducted by the National Public Law Training Center, October 6-10 in Alexandria, Virginia. The course is designed for advocates, paralegals, and human service workers and will cover such topics as employment discrimination against the elderly, supplemental security income, health programs, housing and consumer protection. Contact NPLTC, 2000 P Street N.W., Suite 600, Washington, DC 20036, 202/872-0660.

Environmental Action magazine, which covers such subjects as environmental politics, the urban environment, the public interest movement, energy, and pollution, is seeking an editor. Person selected must have professional magazine experience, a willingness to share in all aspects of magazine production, and "ability to work under pressure in a sometimes chaotic atmosphere." (Sounds familiar!) Send resumes and clippings (no originals) to Box A, Environmental Action, 1346 Connecticut Avenue N.W., Suite 731, Washington, DC 20036.

"Co-ops: A Working Alternative" is the title of the Fourth Annual NASCO Cooperative Education and Training Institute to be held November 7-9 in Ann Arbor, Michigan. The event will include workshops on the Consumer Cooperative Bank, starting housing and food co-ops, low income co-ops, co-op education, senior co-ops, and the roots of the co-op movement. For additional information contact Sheila Ritter, Coordinator, Institute '80, Box 7293, Ann Arbor, MI 48107.

The New School for Democratic Management is offering a course in "Tools for Community Energy Development" November 14-15 in San Francisco. The course is designed to equip participants with a command of energy planning techniques, legal techniques for public acquisition of utilities, and the "realities of appropriate technology." Contact New School for Democratic Management, 589 Howard Street, San Francisco, CA 94105, 415/543-7973.

A reminder to Portland-area RAIN readers and those who may be passing this way: RAIN's unusual library is available to you! Come and browse through our more than 2000 books on appropriate technology, renewable energy, organic agriculture, community development, ecology, and many other subjects. We also have thousands of magazines and drawers full of fascinating files. Our address is 2270 N.W. Irving, Portland, OR 97210, and our usual library hours are 9-5 Monday through Saturday, but give us a call at 227-5110 to make sure we're in when you're coming

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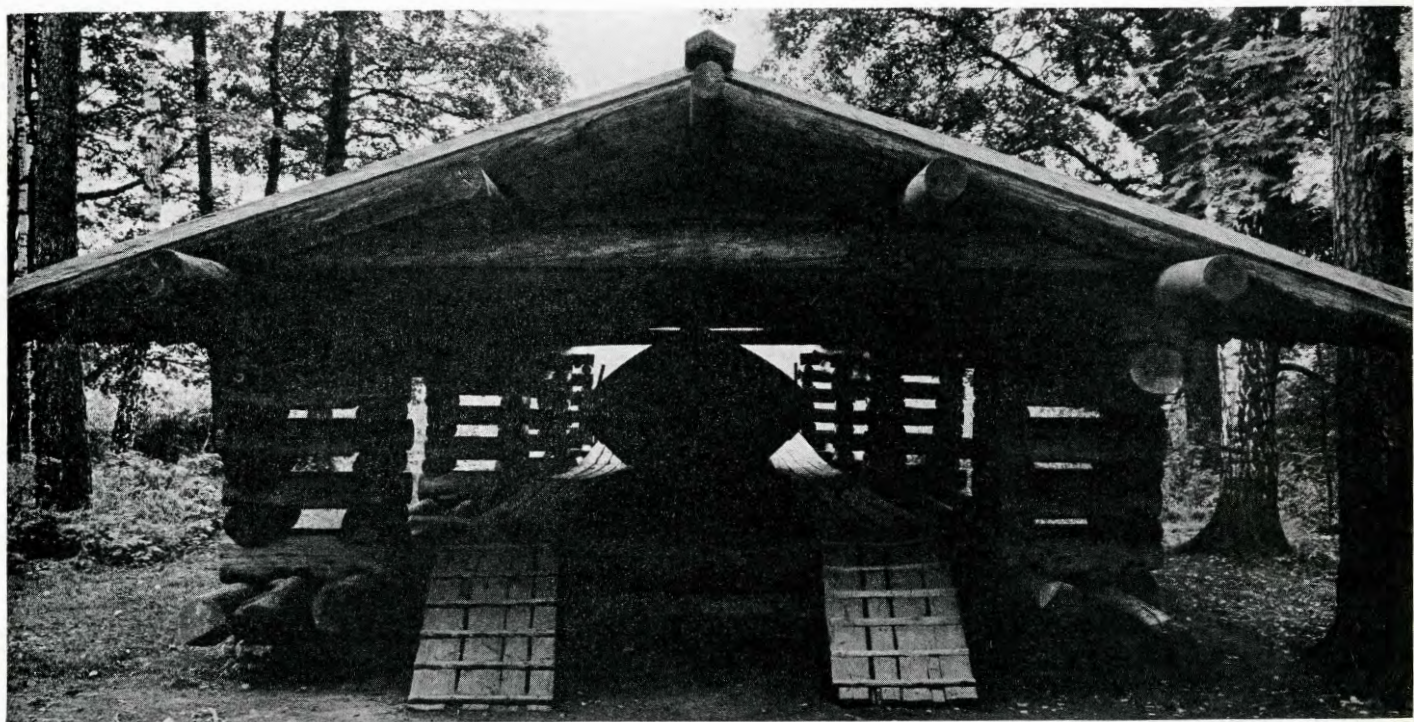
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