

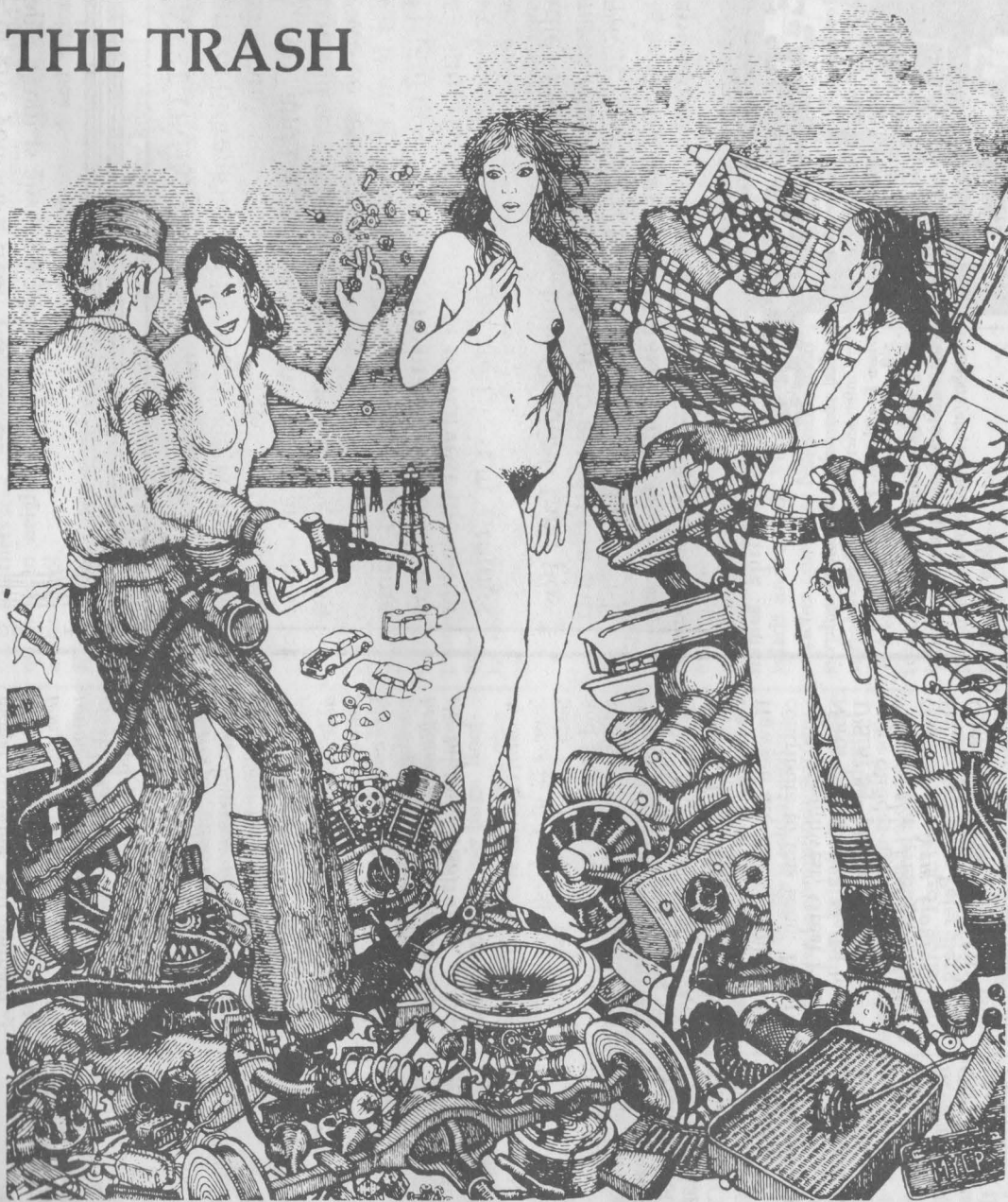
# RAISE THE STAKES

Winter 1983

The Planet Drum Review

Number 6 \$2

## HARVESTING THE TRASH



MICHAEL MYERS

L.A.: A FUTURE HISTORY  
KANSAS HEARTLAND

1st NATIONS  
NO NUKES GET BIO ROOTS



# LOS ANGELES: A FUTURE HISTORY

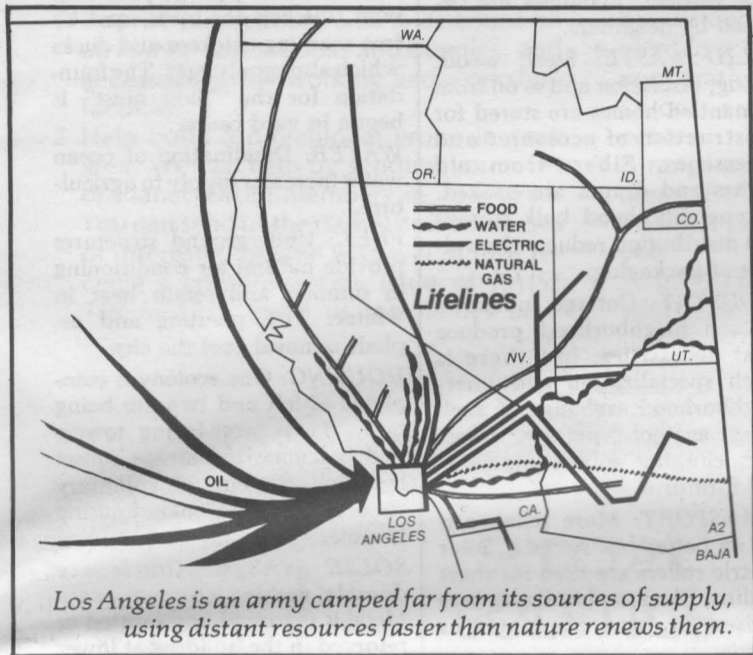
Text and illustrations by Paul Glover

Anyone who is aware of the rapid decline of U.S. Atlantic seaboard cities in the last 20 years has to be struck by the potential magnitude of collapse that could overcome the greatest megapolitan artifact on the Pacific Coast, Los Angeles. Already overwhelmed by traffic congestion and exhaust fumes its population continues to increase at a near boom rate; already overextended by thousands of miles for basic supplies of water, food, and energy its demands escalate while possibilities for fulfilling them become desperately tentative. The veneer is cracking now faster than it can be re-cosmetized and eventually thousands of blocks of dried-up one-story ruins and rusting station wagons may compete with the bombed-out vistas of South Bronx for our memory of the Late Industrial period.

Paul Glover got to Southern

California by walking there from Cambridge, Massachusetts. Six and one-half months of foot contact with North America's rocky hills and wet valleys, forest floors and desert dust, country roads and freeway on-ramps. Disinhabitory Los Angeles became a challenge like unravelling the mystery of the kingdom of Oz. He authored "Amazing Los Angeles" and then began to adapt the concept of citizen planning—neighborhood-sized groups setting their own goals for livable and sustainable communities—to the terminal prospect for Los Angeles. Glover shows a path that can salvage the future for people who live there, and if Los Angeles as presently conceived is lost at least it will be transformed into a place where people can actually walk around something nobody does in LA today.

—Peter Berg



Los Angeles is an army camped far from its sources of supply, using distant resources faster than nature renews them.

Total transformation in the Los Angeles style. Just two hundred years ago this place sheltered hunter-gatherers who danced the porpoise dance. Within sixty years they were trampled by Latinos and their half million cattle. Thirty years later Anglos evicted the Latinos and plowed up pasture for wheat. Thirty years after that the wheat yielded to giant orchards. Another fifty years saw this food torn out for factories and homes. The latest thirty years have raised skyscrapers, superhighways, and a new Latino majority.

The fifth most populous spot on earth has killed Nature. Environmental protection means chaining a dog in the yard. Brown air turns every clean, pink lung a gritty yellow. Trees endure like parsley on an empty plate. Fertile soil lies smothered under asphalt.

Here is the American metropolis supreme: *Water* is imported across hundreds of miles of dry land in the world's longest aqueducts; *Fuel* through the world's largest, longest electric wires sparks 1500 square miles of humans; *Food* trucked daily hundreds of miles to America's largest wholesale market, on Central Avenue, serves an appetite larger than most world nations'; *Metal* extracted worldwide forges products for consumers consuming for the pleasure of consumption.

Another transformation is due. Los Angeles is an army camped far from its sources of supply, using distant resources faster than nature renews them. As the burgeoning populations of western states stake claims to their own lands, our grip weakens. Thus this city reaches farther and farther for coal, to replace petroleum; farther for natural gas because Texas wells have peaked; farther for soil, the food of food, as millions of acres yearly are paved for suburbs and scalped by monocropping; and farther for water to slow our increasing vulnerability to drought. As other needy cities compete for these limited treasures, a hazard looms. Angelenos will eventually lose the political leverage which brings essential wealth here.

If nature is the ultimate law and order, is Southern California doomed? Our region today is so dependent, so uninhabitable yet so inhabited that it must transform or die. Sooner or later it must generate its own food, fuel, water, wood, and ores. It must use these at the rate nature provides them. It can.

Los Angeles has four awesome powers. There is such potent soil under the pavement that this country was the greatest garden in the United States, the top food producer

of all countries between 1910 and 1950.

The sun shines on this place 290 days yearly. A growing season 350 days long permits continuous harvest.

Our nine million people can work together. Skins of all shades of night and smoke, of soil and wood, of fire, seashells and sand cluster and mix on the plain. We resent and love and hurt and help each other. We are magnificent.

Water under this desert gives half of the amount now used countrywide. The ocean desalted is an endless supply.

How do we begin to employ these strengths to create a fruitful, self-reliant city, a sensual city worthy of excellent people and land? How do we prove the region's resources can sustain us?

The first work of citizen planners would be to redesign Los Angeles as boldly as government and industry do: to plan transformations with solar technology and orchards like commerce plans with highways and realty. We would plan broadly enough to coordinate regional use of our resources and flexibly enough to rely on initiatives by individuals and neighborhoods.

Citizen Planners in Los Angeles recommends that neighborhoods inventory their resources and create preliminary designs. Many neighborhoods would combine their designs to best juxtapose homes with croplands, solar turbines, water mains, and solar freight rail.

An environmental inventory suggested by Citizen Planners states aims toward which orderly transitions can be planned, and shows how to fasten the nuts and bolts of metropolitan-scale alternate technology. It presents a city wholly different from the one we know. Experience reminds us that even the immediate problems of crime, traffics, poison air, unemployment, and inflation are not relieved by merely patching the urban mess. Time binds us to great change.

Here follows a short summary of the inventory's aims.

Our city would embrace these precepts:

- Natural resources would be used at the rate they naturally renew. This is the heart of ecology.
- Food and fuel would be produced at household, neighborhood, municipal, and regional levels. This is the heart of social cohesion.
- The economy would be democratically controlled and cooperatively oriented. Work would be apportioned to enable all to labor. This is the heart of dignity.
- Culture would become decentralized and participatory, releasing the creative genius in everyone. This is the heart of joy.

The inventory explores 13 subsystems of the city: Food, Water, Fuel, Housing, Solid Waste, Industry, Transport, Fire Protection, Air, Education, Health, Government, and Culture.

Here is just one sketch of how such a Los Angeles could happen. One Santa Monica neighborhood is shown evolving toward self-sufficiency. The process may take ten, twenty, or fifty years.

## AIMS

**FOOD:** To produce within homes, neighborhoods, and cities of this region all food eaten here. To create high-quality vegetarian diets by organic cultivation.

**WATER:** To bring the most water for the most necessary purposes from the shortest distances with the least use of fuel.

**FUEL:** To reduce fuel demand and to power all homes, vehicles, and machines from the sun. To use wind, wave, muscle, and municipalized petroleum in reserve.

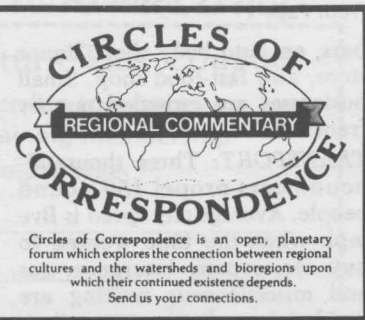
**HOUSING:** To craft solar greenhouse homes of many types, designed by residents to fuel, feed and delight themselves and which are part of beautiful self-reliant neighborhoods.

**SOLID WASTE:** To reduce waste to zero by producing durable essentials and recycling everything.

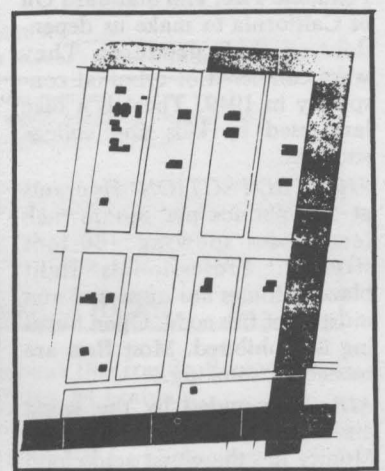
**INDUSTRY:** To produce durable essential tools from raw materials of this region, in neighborhood shops owned and managed by workers. We learn to luxuriate in the necessities before the necessities become luxuries.

**TRANSPORT:** To satisfy physical and emotional needs within walking distances. To reduce transport to zero by producing goods where they're used. Move any raw materials, essential goods, and people by foot, pedal, and solar rollers. Transportation is a waste product.

**CULTURE:** To encourage a decentralized participatory culture expressing the bounty of the planet and of this region, the beauties of its people, and our pride in working together to build and enjoy a sensual city.



## PAST—1932

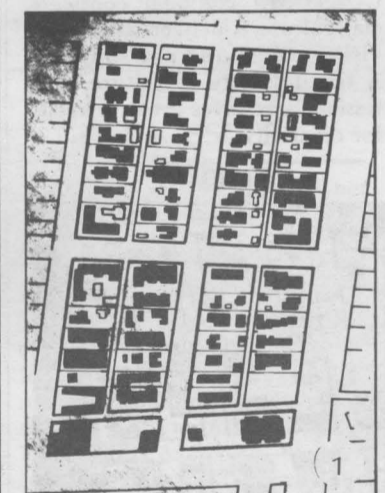


## PRESENT

### ONE

**FOOD:** There are a few small gardens, but 65% of the land is paved or built on. Nearly all food is trucked from distant factory farms. It is tough and bland, soaked with pesticides, controlled by a few powerful companies. Half the U.S. grain harvest is excreted by animals generating one-tenth the nourishment in meat form. A few neighbors analyze soils for lead content.

**WATER:** Half flows from the Colorado River and Sierra Mountains through aqueducts, and half is drawn from local wells. It is pumped to homes in iron pipes laid along the alleys 60 years ago. Three-quarters of it is used to water lawns, wash cars, and flush toilets. It is "unfit even for showering," according to the California State Department of Health. Rainwater is flushed to the ocean through storm sewers. Bottled water is popular.



**FUEL:** Natural gas from Texas is piped up the alleys. Crude oil from Alaska and Indonesia is burned in coastal power plants to generate electricity. Three-fourths is wasted as heat. Overhead power lines in alleys deliver the rest to homes which use six times more than in 1950. Homes are poorly insulated and are equipped with energy-wasting gadgets.

**HOUSING:** Single-family homes, condos and townhouses sit parallel in grid pattern. Only one-fifth are owner occupied. Most have private fenced backyards. The population of 398 lives in 236 units. Their average age is 31. Two-thirds live in families, one-third live alone.

**SOLID WASTE:** Bagged litter is dumped in landfills. Garbage is the main product of the neighborhood.

**INDUSTRY:** Neighbors are controlled by financiers and directors of the largest corporations, who own and manage natural resources, shift investment, and disperse jobs. Located on the main street at bottom are a bank, two

Continued on Page 2



bars, an auto body shop, liquor store, and fast-food shop. Small businesses are crowded out by franchises.

**TRANSPORT:** Three thousand-pound cars propel 150-pound people. Average city speed is five mph when the time worked to buy car, repair, insurance, gas and miscellaneous waiting are divided into distance travelled. A rapid rail transit system was dismantled by General Motors, Firestone Tire, and Standard Oil of California to make us dependent on their products. They were convicted of criminal conspiracy in 1949. There is a bike lane used by kids and college students.

**FIRE PROTECTION:** Hydrants at 250 pounds per square inch feed hoses spewing 150-foot streams. Professionals fight blazes. Homes are inspected and must meet fire code. Open burning is prohibited. Most fires are caused by smoking.

**AIR:** Surrounded by the worst air in the United States, Santa Monica has the worst acid cloud of nitrogen dioxide. It is unhealthy 315 days yearly.

**EDUCATION:** Compulsory state-approved doses of history, math and English prepare students for service to corporations. Age segregation and tracking sort students like grades and sizes of eggs.

**HEALTH:** Stress raises blood pressure, air fouls lungs, processed food clogs cells. These lower resistance to disease. Most doctors prescribe surgery and drugs instead of clean air and good food. The nearest emergency care is one and a half miles away.

**GOVERNMENT:** Neighborhoods are regulated by landlords, banks and corporations. The present city council restrains this power with rent control and construction trade-offs. There is one representative for every 13,000 persons. Advisory commissions and neighborhood organizations have informal power. A minority of neighbors registers and votes once or twice yearly.

**CULTURE:** National commercial culture is delivered by television, radio and newspapers. A tiny minority of culture professionals receives great rewards for creativity.

**FUTURE**



**TWO**

**FOOD:** Some backyard paving, driveways, alleys, and fences are removed. Gardens are expanded privately and cooperatively. Street strips are reclaimed for dwarf fruit trees and berries. Homes at upper right attach greenhouses. Some alleys are gardened. These are fertilized by dry sludge from the central sewage treatment plant. Experiments determine best tree varieties. One hundred fruit and nut trees are planted.

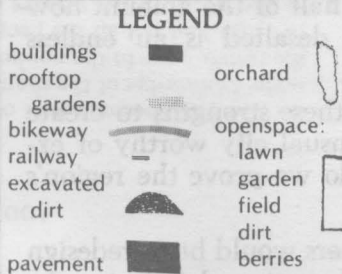
Most cement and asphalt is trucked to industrial wasteland where the water table is low and groundwater is contaminated by industrial seepage. It is stacked on paved land to form thick sloped soundproof walls of large solar foundries or to externally insulate vacated industrial plants for similar purposes. Some asphalt is stacked in the neighborhood to insulate externally the

north walls of buildings.

**WATER:** Home filters and low-flow taps become popular. Taller grass and subtropical plantings grow less-thirsty lawns.

**FUEL:** Some homes install south-facing rooftop solar hot water collectors. Heavy insulation, triple-glazing, weather-stripping, and low-voltage appliances reduce fuel demand.

**HOUSING:** Two homes at upper right connect to create a common lounge and convert their living



rooms to extra bedrooms. Upon departure tenants are credited or refunded the value of property improvements they have made according to neighborhood organization guidelines. Landlords credit half this value against taxes.

**SOLID WASTE:** Glass, newspapers and aluminum cans are collected by expanded city recycling service and sold to corporate recyclers. Some newspapers are shredded for mulch and jars are kept for canning food.

**INDUSTRY:** Zoning allows home businesses with one non-family employee.

**TRANSPORT:** The number of cars stabilizes. Smaller cars are required. More bikes are used for travel within one mile.

**FIRE PROTECTION:** Smoking is prohibited in public places.

**AIR:** A neighbor begins air quality and wind records.

**EDUCATION:** Private and public neighborhood schools teach neighborhood planning skills. **HEALTH:** More births are at home, more people rely on preventive attention and naturopaths. City buys into health maintenance organizations.

**GOVERNMENT:** Taxes are raised on income property. Revenue sharing is given by cities to neighborhood organizations. Any "little city halls" are maintained by neighbors.

**CULTURE:** Video and cable decentralize television.

**THREE**

**FOOD:** Three hundred fifty dwarf trees in streets and blockyards yield fruits and nuts. Varieties are selected so they ripen one after another all year. More solar greenhouses and solar drying further extend seasons of availability. Intensive raised bed vegetable, berry and herb gardens supply the neighborhood and local farmers' markets. Food production is also increased by fertilizer from compost toilets and mulch from leaves. Companion planting stimulates growth and controls bugs. Rooftop beehives pollinate and give honey.

The city reduces property taxes in urban agricultural districts where neighbors harvest large quantities. Rents are correspondingly reduced. The city helps tenants purchase cropland, and land trusts are formed to end speculation. Development options are tied to agriculture.

**WATER:** Water is sold at agricultural rates to community gardens using drip irrigation. Compost toilets reduce indoor residential use by half and help rebuild soil. Greywater is filtered and flushed to orchards. Toxic chemicals and cleansers are banned. Drinking water is distilled on roofs by the sun. Neighborhoods buy property for the land trust before making improvements which would cause speculation or raise rents, either of which could displace them.

**FUEL:** Most homes are largely

reliant on passive solar heating and photovoltaic electricity. Municipalization of electricity cuts rates.

**HOUSING:** Downzoning and rent control are administered by neighborhoods. Land and home ownership is limited to two or three places. Most garages are removed or converted to temporary housing. Regional growth limits are established. Certain areas are prohibited for settlement, and slowly return to wilderness.

**SOLID WASTE:** Kitchen scraps are composted. Metal and wood pieces from dismantled buildings are stored in designated garages.

**INDUSTRY:** A barter economy of food, tools and skills is well developed. City property is conveyed to the neighborhood land trust, block association or community development corporation. Income from donations, assessments, businesses, tax withholding, and escrow accounts keeps money in the neighborhood for its own purposes.

**TRANSPORT:** Cars are parked diagonally at neighborhood's edge. Many are solar-electric powered.

**FIRE PROTECTION:** Neighbors learn prevention and mutual aid.

**AIR:** Streets and homesites removed for planting are immediately sown to renew oxygen and keep dust down.

**EDUCATION:** Young and old explore together. The natural human enthusiasm for learning



is released. Field trips to solar equipment manufacturers, organic orchardists, and other alternate technologists are emphasized. Learners seek applicability of these to neighborhood scale and control.

**HEALTH:** A medical station and medical library are established in the area, staffed by paraprofessionals.

**GOVERNMENT:** Apartment-house dwellers who combine to buy their homes each have one vote. The city helps fund such purchases from pension funds, carry over reserve funds, tax-exempt bonds, and cost-of-living loans. Neighborhood town meetings give everyone direct voice.

**CULTURE:** Traditions which promote these aims are encouraged. Neighborhoods issue weekly two-sided broadsheet newspapers, printed on solar presses.

**FOUR**

**FOOD:** Solar pumps boost irrigation from mains. Fruit and nut trees now number 810. Crops are rotated. Rooftop greenhousing extends the harvest. Fruits, nuts and berries are espaliered on homes. Sprouts are raised for salads and bread. Vermiculture enriches compost. Neighborhood surplus is stored in former sub-surface carparks.

**WATER:** Decreased paving allows absorption of rainwater which refills groundwater and permits monitored, solar-pumped wells.

**FUEL:** Consumption is reduced by use of technologies requiring less fuel in pumping and transport of food, fuel, water, people, products, and waste. Photovoltaic tools are highly developed. Underground biogas digesters fed

by toilet and kitchen scraps produce methane used for cooking, heating, and illumination. Ownership of oil fields transfers to public domain and oil is used as backup.

**HOUSING:** Construction of community houses begins. Consolidation of 73 dwellings into four semi-underground three-story, south-facing, solar-greenhouse "ecolonies" creates more open space within neighborhood for orchards, gardens, and play. Each sheltering about 100 of the neighborhood's 400 people, the ecolonies have well-soundproofed private spaces for those living alone or as couples, in nuclear families, extended families, and neofamily groups. There are common areas for child care, medical care, parties, meetings, dances, lounges, food production and processing, arts and exhibits, bathing, libraries and learning, theater, worship and meditation, and cottage industry.

Underground sections built into the hill are lit by large atria and skylights. All aboveground parts have direct access to outdoor gardens. Ecolonies are designed by neighbors.

**SOLID WASTE:** Steel, wood, piping, insulation and so on from dismantled homes are stored for construction of ecolonies and necessities. Fibers from old clothes and drapes are packed. Interneighborhood bulk storage and distribution reduces the volume of packaging.

**INDUSTRY:** Cottage industries in each neighborhood produce most necessities, but there is much specialization and interneighborhood exchange of such things as tools, pottery, bikes, glass, clothing, solar equipment, and furniture.

**TRANSPORT:** More reliance is put on better bus systems. Solar electric rollers are used for short hauling. Blockyard walkways are revised as land use patterns change.

**FIRE PROTECTION:** All residents are prepared to use bells, pumps, hydrants, and hoses located near the middle of each blockyard.

**AIR:** Grains planted on piles of dirt from ecology excavations control dust.

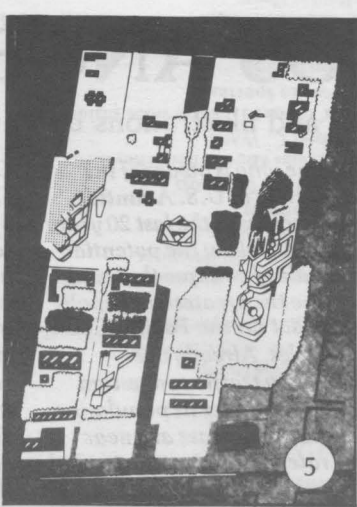
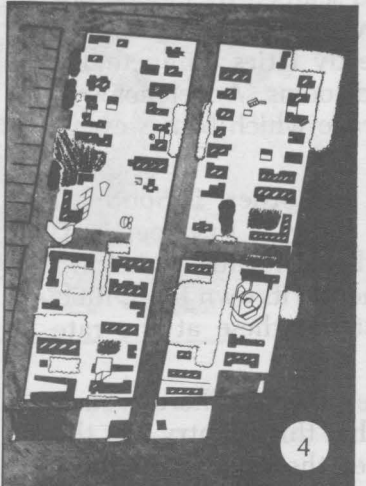
**EDUCATION:** Knowledge for operating and sharing control of one's neighborhood has highest value. Everyone is prepared to represent the neighborhood at interneighborhood and regional councils. Neighborhood schools are forums where anyone may teach what they know and do so by posting notice of presentations. Learning is enjoyable rather than compulsory.

**HEALTH:** Better food improves resistance to disease.

**GOVERNMENT:** City-owned banks invest in housing and worker-cooperative businesses.

**CULTURE:** Hundreds of solar-powered interneighborhood radio stations (radii 1/4-mile to five miles) encourage broadest participation in media and sharing of ideas, allowing audiences to work and create while listening.

Daily newspapers become weeklies freed from advertising. Ads become unnecessary as society offers genuine satisfaction of human needs rather than commercial substitutes.



**FIVE**

**FOOD:** Grains grow atop dirt piled from excavation for ecolonies. Huge ecology rooftop gardens and solar greenhouses at left center are tended on a personal, family and group scale. Earthquake-proof storage racks hold large reserves in ecology. Orchards now include 1175 fruit and nut trees.

Harmful insects are controlled with intercropping, predator bugs, thickets for birds, and by free-roaming chickens and ducks which also supply eggs. The foundation for the "food mast" is begun in yard center.

**WATER:** Desalination of ocean water increases supply to agriculture.

**FUEL:** Underground structures provide natural air conditioning in summer and retain heat in winter. Tree planting and asphalt removal cool the city.

**HOUSING:** One ecology is completed at left and two are being built. Their west-facing towers and balconies encourage sunset lounging. Systems of voluntary residence exchange make housing flexible.

**SOLID WASTE:** Goods are durable, nothing is thrown away. Metal is reground and refitted or reforged in the building at lower left.

**INDUSTRY:** Worker-managed neighborhood businesses produce a more personalized and creative variety of goods. Less is consumed, more is appreciated. The best things in life are freed. Construction and demolition are major labors.

**TRANSPORT:** A rail network is revived. Ties are submerged, grass grows between tracks. There is less need to commute as work localizes. Inner streets are removed. The most-travelled walks are relaid as brilliant mosaics designed by neighbors.

**FIRE PROTECTION:** Ecolonies are fireproof, and vented for smoke.

**AIR:** Air begins to clear because residents employed in neighborhood production need not commute. Most of remaining commuting is by rail and bike.

**EDUCATION:** Each block and neighborhood becomes a university. Learning becomes exploration with real effect in the world. Knowledge is freely shared; the overspecialized knowledge elite declines. Visitors are invited to make presentations.

**HEALTH:** Moderate physical effort makes people stronger and sexier. Increasing social cohesion, sense of purpose, love, and belonging improve health, stamina and power.

**GOVERNMENT:** Neighborhoods receive 75% of city taxes. Workplace democracy prepares citizens for neighborhood self-government.

**CULTURE:** People become their own media, projecting their enthusiasms and longings creatively. Everyone is an artist, sharing in dance, paint, storytelling, music, and craft.

**SIX**

**FOOD:** Neighbors produce half their own food. Orchards flourish with 1855 fruit and nut trees. Completed food mast at center grows trellised berries, vines

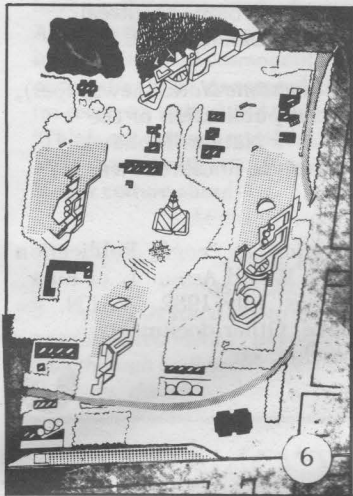


and herbs in window boxes. This open-girdered structure serves also as a radio tower, solar spire, fire tower, lookout tower and lounge, sundial, and—on lower levels—as a meeting and social area, learning center, health center, planning and assembly center, food cellar, and community kitchen.

**WATER:** Rainwater is collected from ecology rooftops and stored in cisterns.

**FUEL:** Solar cells and silent windmill atop the food mast (solar spire) fuel its purposes. Solar turbines and solar furnaces power foundry, pottery, and rail system. Underground spaces in ecologies are illuminated by atria which also hold cool night air. Woodlots are used for wood goods rather than fuel, because citywide woodburning would pollute air as in the nineteenth century.

**HOUSING:** Three ecologies are completed and one is being built. The extended family revives and neofamilies strengthen. There is less space per person but soundproofing allows full privacy. There is more access to public and



outdoor space. Built-in shared areas permit friendlier and safer living.

**SOLID WASTE:** Glass shards are

melted in solar furnaces (big circles at center below), and fragments are used in stained glass mosaics. Half the autos have been melted to become agricultural tools and bicycles.

**INDUSTRY:** Major corporations become obsolete as their functions are performed by neighborhoods and their products are no longer desired. Without consumers they evaporate.

**TRANSPORT:** The expanded "grass rail" network is powered by solar booster stations, as at lower left. Long distance rail travel decreases as commerce localizes. Auto traffic is half the former level.

**FIRE PROTECTION:** The city becomes more fireproof than ever. Ecologies, bikeways and open areas are firebreaks. Every other orchard irrigation line is set to spray water walls to fight fires. Water cannons are built into balconies of ecologies and half way up the food mast.

**AIR:** Solar turbines end industrial emissions. Automobile poisons have been cut by half.

**EDUCATION:** Library in base of the food mast is a center for planning. Huge community bulletin boards post information, schedules, exchanges, and ideas for discussion.

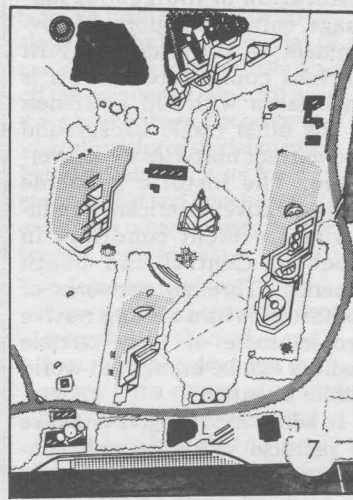
**HEALTH:** Better air improves vitality. Neighborhood-operated emergency room, birth center, clinics, and 15-bed hospital at base of food mast keeps the stricken among friends.

**GOVERNMENT:** Neighborhood entities control all governance self-tax, land-holding, zoning, and import-export. After study and discussion, policies are made by full assemblies of people.

**CULTURE:** Television and video decline. Life gets highest ratings.

#### SEVEN

**FOOD:** Most eaten in the neighborhood is produced by 2690 fruit and nut trees, eighth-mile



grape arbors in former alleys, two acres of intensively gardened organically fertilized rooftops, greenhouses, and open field. Plantings are contoured to natural drainage of airflow and water. Neighborhoods help each other in times of failed or short crops.

**WATER:** Natural drainage is nearly restored. Spherical reservoirs are installed at upper left.

**FUEL:** Wave motors aid desalination.

**HOUSING:** Fourth ecology is near completion. Private and social spaces have been arranged to encourage sense of solidarity and equity.

**SOLID WASTE:** Landfills are closed. Nothing is wasted.

**INDUSTRY:** Natural resources of the region are owned and managed by the public.

**EDUCATION:** There is terrific cross-pollination between cities. Voyagers are asked to bring back new ideas from places they visit. Rewards for knowledge and ability are the privilege to serve the community better and to be heard.

**TRANSPORT:** Only a few emergency vehicles ride remaining streets. Preferred vacations are several-months walking and bicycling tours. Slower motion

opens travellers to richer experience, deeper relationships, pleasure and learning. Travellers stay up to one week at neighborhood travellers' houses, work two hours daily and meet people. Community tricycles or solar rollers are issued to infirm visitors. They remain longer if invited to stay with a resident.

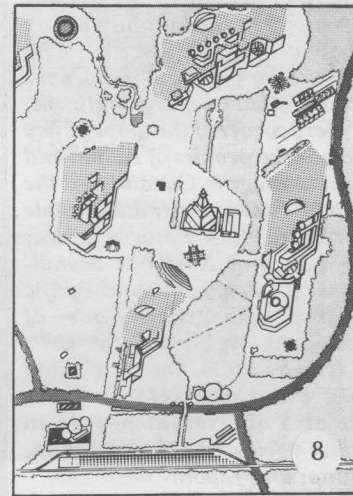
**HEALTH:** Medicinal herbs are grown.

**GOVERNMENT:** Ecologies are the homes of direct democracy.

**FIRE PROTECTION:** Belts of instantly saturable pasture stop flames.

**AIR:** Industrial pollution is ended. Few cars remain.

**CULTURE:** Crime declines because agriculture gives purpose and employment to all. Thus social cohesion is strong. Success is redefined so all succeed as neighbors.



#### EIGHT

**FOOD:** All eaten here is from interneighborhood sharing. Now 4020 fruit and nut trees have been planted. Huge greenhouses on rails, at upper right, protect tropical crops in winter.

**WATER:** A combined community steambath-swimming pool and tropical greenhouse is attached to the food mast.

**HOUSING:** Ecologies are com-

pleted. They can be remodeled and inner walls shifted. The limit to housing supply stabilizes population. Housing is owned by the neighborhood, maintained and possessed by occupants.

**INDUSTRY:** Everything is produced from the raw materials of the region.

**TRANSPORT:** Most physical and emotional needs are met within walking distances. Cars are gone.

**AIR:** Sweet scents of blossoms make breathing a pleasure.

**LEARNING:** Survival treks in wilderness, which has enveloped former rural areas, develop strength and animality.

**HEALTH:** The emotional basis of wellness is fully appreciated.

**GOVERNMENT:** Neighborhood representatives to interneighborhood and regional councils are selected by lottery from all who choose to register. Representatives are required to vote as directed on issues the community has debated. Regions confederate with other regions. Nations no longer depend on or fight for each other's natural resources, so international tensions relax.

**CULTURE:** An amphitheater and stage are completed at lower center. They are used for drama and neighborhood meetings. One of the original single family homes is a neighborhood museum. New rituals evolve to celebrate color, fragrance, texture, harvest, quiescence, sex, eternity, love, invention, and sun.

#### CONCLUSION

Weaving nature into Los Angeles will be a tremendous enterprise, encouraging millions to push past the fear and cynicism of the times toward lives they deserve.

In this decade citizen planners will prompt a more durable and more loving refashioning of our city, using simpler technologies. It is not a return to the past, but a return to the future.

Contact: Citizen Planners, 737 Sunset Avenue, Venice, CA 92091.

There is a natural setting for New York City but from its seemingly isolated World Trade nexus point at the mouth of the Hudson River no life-web connections seem apparent or even necessary. They are, of course, and some people are getting together to let their fellow Hudson River-Manhattan Fjord inhabitants know what they're missing.

This is the announcement of a proposal to create a Manhattan Fjord bundle like those that Planet Drum has previously done for "North Pacific Rim Alive" and "Backbone—The Rockies." It will reveal the first steps for redefining a vital life-place in a decaying urban setting to fulfill Whitman's "liquid, sane, unruly, musical, self-sufficient" idea of what Manhattan Fjord should be.

—Robert C. Watts

#### A MAP OF THE BIOREGION

The boundaries of a bioregion are soft. They move around a bit and act almost as a permeable membrane between adjoining neighbors. While sketching out preliminary boundaries of the lower Hudson River bioregion, this map and prose rendering of ecological locales will describe what is unique in the Manhattan Fjord. Glacial movement, geological action, and the Hudson River itself have defined the physical landforms—the watershed foundation—that carry distinct biological organizations of plants, animals, energy flows, and material cycles. A map and booklet produced around this theme of biotic makeup will seek to convey information and nurture a new cultural identity of reinhabitation—an identity infused by a sense of this place.

#### TOTEMS

Certain member species of ev-

ery bioregion have special import because of their symbolic role as "meaning" bearers—within their own life cycles is contained an image of health for the entire life-place. They are ecological and biological actors of the most immediate kind: these members—now totems—point beyond themselves to a history of natural processes whose wellbeing is intimately tied to our own. What are the totem animal(s) and/or plant(s) for the lower Hudson Valley?

This piece of the bundle will explore the totems of this bioregion and seek to convey the ceremonial possibilities of "giving-back" to place. By taking part in the mutual regulation of the bioregion, through ceremony, humans can again embrace the daily details of their natural surroundings as well as give cultural cohesion to the practices of reinhabitation.

#### ECONOMY

Material provision is a necessity recognized and shared by all. The means by which a people clothe, feed and house themselves create innumerable systems of exchanges, whether it be in the household, in the marketplace or in politics. We live in an industrially defined environment and,

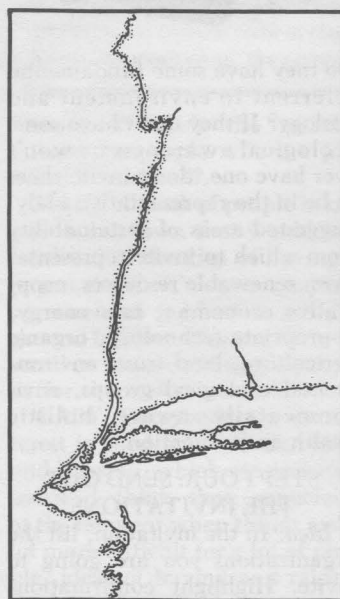
## NYC OR MANHATTAN FJORD?



as such, inherit a set of options for providing for ourselves. This piece of the bundle is not an analysis of these options in terms of prosperity, hardship, or possibilities of chance within the industrial model. Instead, it is a search for bartering systems that are both indigenous and non-industrial. We are well steeped in industrial ways of attaining goals with their associated tasks, but when we step out of late industrial means of provision we are left with few references, an indicator of just how one-dimensional global monoculture is. In this regard, it makes sound sense to explore how people native to the area exchanged goods, and how biogeographical characteristics of the bioregion render suspect high-energy technologies.

#### POETICS

Many of us remember stories



Hudson River Valley

told by the older members of our family or community. Some are "true" life adventures while others are stories told to convey a sense of experience and the knowledge to be gained by it. These are vestiges and remnants of past oral traditions which helped glue societies together. This piece of the bundle will be an attempt to recombine, through image and verse, what a song, chant, or story might be for the lower Hudson Valley.

#### TECHNICS

How do we account for public needs, such as water supply and waste removal, that interact directly with the household?

Answering this question usually means running with two parallel themes. The first is the tools at hand. The second is the logic of development employed by those involved in the application of technology, whether it be the field person, designer or policy maker. Modern industrial capacities are given shape and direction by developers who have norms of what modern growth should be. As an urban planner, Robert Moses is a good example of a person with an industrial logic of development and institutional power base who was able to leave an imprint on Manhattan and the areas surrounding it.

Just as there are late industrial answers to the question of meeting public needs, there are other answers rooted in preservation and restoration of the bioregion. This piece of the bundle will explore possibilities within the boundaries of the lower Hudson Valley. By taking housing and energy needs as starting points, an outline of technological

choices, whether mechanical or biological, will be elaborated within the framework of eco-development.

#### WHERE IT'S GOING TO GO

Distribution of the Manhattan Fjord bundle can follow different paths but with a common intention and purpose: to lay out a terrain of cultural identity that can facilitate change within the community.

Consider these as starting points:

Visit sympathetic groups in the area and discuss the possibilities of giving the bundle to their members as a gift to be taken in, used and passed along. Several things can be hoped for as a consequence. The first is a natural and unforced order of networking. By locating the groups who share common concerns, we can garner criticism and support from those with whom we share kinship, making for more creative and higher quality work. Alliances have to be built and work done.

The second starting point would be to distribute the bundle through the Planet Drum Foundation. As a conveyor of information on reinhabitation, it is at the hub of cross currents and has a national network of bioregionalists. Sending the bundle to the Planet Drum members would put the word out that something is getting underway in this region.

The bundle is being produced through a nonprofit agency that publishes the journal *All Area*. All individual or group contributions, payable to *All Area*, are tax deductible.

Initiators: Thomas Berry, Bob Carroll, Paul Ryan, Gerd Stern, George Tukel.

Contact: Manhattan Fjord, 6 Stuyvesant Oval, New York, NY 10009.



# 1st PEOPLES ARE HERE TO STAY

by Bill Curry



Only ten years ago an international meeting concerning indigenous cultures meant merely another gathering of anthropologists representing "their" peoples to scrutiny. Native groups or first people weren't encouraged to convene from different places on the planet to represent themselves or find out first-hand about each other. Recent meetings between North and South American tribal nations, circumpolar peoples and Pacific Islanders have been historic events in the evolution of planetary culture. The adoption of their concerns on a worldwide level may ultimately prove to have the greatest influence toward establishing biosphere-centered international political values.

—Peter Berg

Several thousand indigenous people from around the world came to Regina, Saskatchewan (Canada) for the July 18-25 World Assembly of First Nations (WAFN '82).

Chief Sol Sanderson, president of the Federation of Saskatchewan Indians and WAFN Chairman, said it succeeded in raising the profile of the Indian community to the international level. He predicted that Regina's largest-ever conference—a mammoth undertaking involving cultural and sports events as well as business and education sessions—would be a key step in establishing a permanent organization to represent indigenous people around the globe to take action regarding economic development and trade, education, culture, international law, circles of elders, and aboriginal titles. An international covenant and code of

ethics are being advanced on behalf of all indigenous people.

The *Prairie Messenger* (Muenster, Saskatchewan; 1 August 1982) reported, "The First Nations are the indigenous people found on every continent, in every corner of the globe. They include the peoples of Indian and Inuit heritage in Canada and the United States, the Indian people of Central and Latin America, the Lapps of Northern Scandinavia, the Polynesian and Pacific Basin peoples, the Basques of Spain, the Welsh and the Celts of Great Britain, the Maori and Australian Aborigines. There are also aboriginal people in India, Africa, the Soviet Union, China, and Japan."

Speakers reached beyond differences of history and culture for common principles of self-determination and fundamental human rights. Recognition and

restoration of indigenous language, culture, religion and government is a world-wide First Nations commitment. This is undertaken with full awareness of the often tragic background and current obstacles to be overcome. The historic genocide against native Americans continues as a present condition in much of Central and South America. Through networks of communication among native peoples some of these terrible realities can be brought to world public attention.

In addition to the give and take of political solidarity and concrete organizational tasks, speakers from all parts of the world identified a fundamental outlook shared by all. As expressed by Chief Oren Lyons a few years ago, "We see it as our duty to speak as caretakers for the natural world. Government is a process of living together, the principle being that all life is equal, including the four-legged and the winged things. The principle has been lost; the two-legged walks about thinking he is supreme with his man-made laws. But there are universal laws of all living things. We come here and we say they too have rights."

It is significant that North American Indian organizations are now determined to go to the U.N.—as First Nations. Until recently, the formal mainstream organizations dismissed this as a radical fringe concept, but now the U.N. is seen as the appropriate and legitimate forum for the settlement of indigenous peoples grievances, and negotiation of economic development programs.

A serious analysis and critique

of the United Nations was voiced by many delegations at WAFN. Any First Nation U.N. strategy must deal with the problem of the dominance of the U.N. by the same superpowers which now oppress indigenous people. It is possible to distinguish among individual countries at the U.N. in their ability to comprehend and support the principle of First Nations self-determination. Indigenous movements, often a majority, can also be identified within certain countries and often these bridge the imposed political boundary lines.

Ultimately we must represent ourselves. We face the challenge of bioregional identity and indigenous solidarity. Essentially, we are asking the question of Home. Where do I belong? What can I do to be welcomed Home? In what ways can we bring people Home, or help them find their place elsewhere?

When Columbus made it across the Atlantic, he was moved to record that the people he met were made in the image of God, "du Corpus in Deo." In Deo, hence indios—the people—Indians. Three hundred years later the great buffalo herds of the Plains were destroyed to make way for the railroads, carcasses were left to rot and bones to bleach. In 1882, the government of the Northwest Territories and the headquarters of the Northwest Mounted Police (now the RCMP) were established at a place called Pile o' Bones, now Regina. In 1982 at WAFN some of those same bones were part of mixed media works in the WAFN associated major gallery showing of native art.

Chief Oren Lyons said, "We

owe a debt of gratitude to the buffalo. They stepped in front of the white man's guns and took the brunt of the bloodthirsty time. They sacrificed themselves for us. We believe that had they not taken the brunt, the Indian people would not be here."

Contact: World Assembly of First Nations, 109 Hodsdman Road, Regina, Saskatchewan, Canada S4N 5W5; or

World Council of Indigenous People, United Nations Plaza, New York, New York 10007.

## A 1st NATIONS PRIMER

This is by no means extensive, but simply a list which arises from the World Assembly of First Nations.

—*The First Nations: Indian Governments in the Community of Man* by Delia Opekokew; 1982; 52 pp. plus appendices: covenants, documents, statement. WAFN, see above.

—*Interculture* (periodical) features Native Law and Native Rights series; also back issues on Native America and world religion and culture, communication ecology. Centre Monchanin, 4917 St. Urbain, Montreal, Quebec, Canada H2T 2W1.

—*Akwesasne Notes* (newspaper), official publication of the Mohawk Nation. Mohawk Nation via Roosevelt, NY 13683

—*Indio: The People*. Publication of the World Assembly of First Nations. July 1982. WAFN, see above. Other documents, speeches, etc.



## STARTING OVER: THE 1st NORTH AMERICAN BIOREGIONAL CONGRESS

Bioregional groups are forming so quickly that Planet Drum is planning a new map of North America to re-present the continent in terms of areas that are being reclaimed. Northwest Nation in British Columbia, Regional Awareness Project in San Antonio, Reinhabiting New Jersey, Manhattan Fjord, Kansas Area Watershed . . . and all the groups listed in this issue's Bulletin Board. Besides each group's work of determining boundaries, priorities and activities for its own bioregion there has always been the question of how geographically widespread groups can eventually relate to each other. In 1976 Planet Drum published "Amble

*Toward Continent Congress* with this vision of a bioregionally reconstituted North America, "There needs to be Continent Congress so that occupants of North America can finally become inhabitants. . . . This time congress is a verb. Congress, come together. Come together with the continent."

David Haenke, a founder of Ozarks Area Community Congresses and a road-person for the bioregional movement, feels it's time to call for the first Congress. If you want to form a group in your area to send delegates, David offers a method for getting people together with himself possibly as an assistant.

—Peter Berg

To cohere the energy of bioregional congresses along with the movements they represent in political ecology, bioregionalism and sustainability, a North American Bioregional Congress (NABC) is being called for May 1983. The Ozarks Area Community Congress and the present members of the NABC coordinating council invite you to participate in the first major convening of the bioregionalist movement. Possible site: in or near the Ozarks bioregion.

The suggested purposes of NABC include:

- (1) affirm and begin to move on our awareness that the true transnational North American/Turtle Island and planetary governance already exists under the ecological law of the biosphere, which directs the functioning of all life on Earth,
- (2) through the politics of ecology and bioregionalism, translate ecological law into the terms of human law as a constitution, a pragmatic program and ecopolitical platform for the economic, agricultural, technological, and social patterning of North America under the ethic of sustainability,

- (3) declare the "new" biopolitical regions under which governance takes place: ecosystem, within watershed, within bioregion, within biogeographical province, within Earth's biosphere.

The first coordinating council meeting for NABC was planned for the third Ozark congress, OACC III, in November (too late to cover for this issue of *Raise the Stakes*; expect a report next issue). If you would like to participate as a co-sponsoring group or individual in NABC or get more information, send a stamped, self-addressed envelope to NABC, Box 67-2, Caulfield, MO 65626. (A small donation to help with printing costs would help too, thanks.)

Organizing a congress is not that hard, and it doesn't take much money. It does take some time. Here's a simple outline of how to do it, based on my experience with Ozarks Area Community Congress, Kansas Area Watershed, and others in formation.

### STEP ONE:

#### DEFINE THE REGION

In defining the region there are two main questions.

1. How large an area do you want to cover? If you want to begin organizing a whole bioregion the area may be enormous (like the Great Plains). In this case you may choose to begin by organizing a large watershed, like the KAW Council did with the Kansas River watershed which lies within the Great Plains bioregion. There are advantages to beginning on a large scale, however. The Great Lakes bioregion is huge, covering parts of seven states and Canada. But a Great Lakes Bioregional Congress can bring together the essential energies of that vast area, which then can generate watershed organizing within the bioregion.

2. What, and where, are your resources and potential invitees to the congress? In checking out where the individuals and organizations representing sustainability are located you may find the

## ORGANIZING YOUR OWN BIOREGIONAL CONGRESS

by David Haenke

outlines of the region you want to organize: bioregion, watershed, or even state. Indeed the most effective area to organize within may be a state. In that case it would be a sustainability congress, e.g., the New York Congress on Sustainability.

### STEP TWO: FORM A CONGRESS ORGANIZING COMMITTEE

### STEP THREE: IDENTIFY THE REPRESENTATIVES YOU ARE GOING TO INVITE FROM WITHIN THE REGION

The suggestion is that they come from the areas of political ecology, bioregionalism, and the movements working for sustainability under ecological law.

Do they have some fundamental referent to environment and ecology? If they don't have some ecological awareness or won't ever have one, don't invite them to be in the representative body. Suggested areas of sustainability from which to invite representatives: renewable resources, cooperative economics, safe energy, appropriate technology, organic agriculture, land trust, environmental/ecological groups, environmentally aware holistic health and education.

### STEP FOUR: SEND OUT THE INVITATIONS

Idea: In the invitation, list the organizations you are going to invite. Highlight confirmations if you can get them in time. Also make it plain in the invite that this is a congress, not a conference



—the congress being a fully participatory event, unlike a conference where you sit around and listen to keynote speakers, workshop leaders, and other entertainers.

### STEP FIVE: CONVENE THE CONGRESS

Suggestions on the nature of the event, which should also be announced in the invitation:

1. Try to keep the cost low. Outdoor sites in beautiful places can be free or inexpensive. Serve simple nourishing foods from big pots. You can end up with extra money at \$15/person by staying basic, break even at \$10, depending on site costs.
2. Form congressional committees to deal with energy, agriculture, health, education, economics, political action, communication, environmental protection (defense), and whatever else is major in your region. Suggest that these committees write resolutions/mission statement/action plans to be presented and ratified by the full congress. These become the framework of the congress. This committee work should be given ample prime time, with priority over workshops, plenary sessions, etc.
3. Full group time is valuable. Suggest that any plenary presenter be limited to 15 to 20 minutes during any given plenary session.

4. Don't overschedule. Leave plenty of open time for free-form networking and caucusing. Emphasize participation among equals over events like workshops which set up a presenter/audience relationship. Workshops are important, but they get lowest priority for prime time in a congress.

5. Entertain yourselves. There will be plenty of talent among your participants without bringing in outside entertainment which can cost a bunch of money.

6. Suggest that the congress not get too ambitious right off by loading itself and its committees with all kinds of demands, goals, and objectives to be done in a few months. Emphasize sustained effort at comfortable levels over a lifetime or more. Though it's deep and vital work, it has to be fun and nonstressful or it won't work. The bioregional congress is the ecopolitical analogue of permaculture. Sustain.

I have recently decided that one of the main reasons I am on this planet is to help organize bioregional congresses. If you want to organize one in your region, I am at your service however I can help, either from here in the Ozarks, or I will come to where you are if need be, if you can help me get there. Contact me at Box 67-2, Caulfield, MO 65626.



# "NEW POPULIST" MODEL FROM THE HEARTLAND: KANSAS AREA WATERSHED

**F**rom April 30 to May 2, 1982, a group of 120 people joined together outside Topeka, Kansas, to share information and skills in creating alternatives toward a sustainable way of life in the Prairies bioregion.

Events and activities included a barter fair, native plant walks, music, watershed rituals, plenty of home grown foods, and presentations by those well-versed in bioregional organizing and prairie permaculture.

Nine interest groups met and developed the platform of resolutions and recommended actions which is the principle outcome of the gathering. We've excerpted reports below (other groups met on ecological politics, spiritual and environmental well being, peace, and feminism and human rights); for a full statement write KAW. The document results from a perfect example of how a committed bioregional group comes together and organizes from a collective reality rooted in issues of regional concern.

—Robert C. Watts

Contact: Kelly Kindsher, 716 Lake,  
Lawrence, KS 66044; 913-842-1407.



The first gathering of the Kansas Area Watershed Council was a spirited success. It was the beginning of an organized spokesgroup for our bioregion—the prairie. Over 120 people attended last May Day weekend at Camp Hammond near Topeka, enjoying the mild spring weather, the greening of the land dotted with wild indigo and verbena blossoms upon the prairie, sweet william and may apple blossoms in the woods.

One major focus of KAW Council

tions. They are a platform from which we can begin to present our ideas, beliefs, and commitments to where we live.

## ECONOMICS

Using as our starting point the Ozarks Area Community Congress II resolutions, and after considering our personal perspectives and some material on barter and on commodity-based currency, we arrived at the following resolutions and actions.

### Resolutions

1. To arrive at bioregional self-reliance and to reduce our dependence on the increasingly fragile international monetary system the Council supports the development of legitimate alterna-

means of capitalizing alternative economic ventures, from sources such as the National Consumer Co-op Bank, foundations, credit unions, etc., and make this information available for the businesses we support. We will also institute the KAW Trust Fund as an economic development fund for our watershed. This fund will be separate from the KAW Council operating revenue, and will be a repository of donations and loans administered by the Trustees of the Fund, who will make loans and grants to any enterprise that will benefit the Kansas Area Watershed.

## COMMUNITY/LAND BASE

### Resolutions

1. We believe in a high degree of personal self-reliance within a framework of cooperative interdependence with each other and with nature.
2. We believe that the concept of "interdependent self-reliance" be practiced at the most local decentralized level practical.
3. Recognizing that human beings have primary responsibility for the preservation of our Earth and realizing the limits of her resources, we promote the principles of land stewardship.
4. We support and encourage communities throughout the bioregion that are developing, and teaching by example, right relationship with the land.
5. We support the concept of smaller landholdings that are locally controlled, owned, and operated.
6. We support further investigation into alternatives to private land ownership such as land trusts.
7. We support the development of a human and earth-based value system rather than our current economic and political value system.

## ECOLOGICAL LIVING

### Resolutions

1. We encourage each person to greet each day and give thanks to the Earth.
2. We believe that ecological living means being an integral part of as many natural cycles as possible, and that a sustainable community is analogous to the ecosystem.
3. We believe that the Earth and the outdoors are the source of healing power. We encourage each person to experience and share this power as much as possible.
4. We encourage each person to evaluate the immediate and long range ecological impacts of their actions and to take personal responsibility for



Big Bluestem *Andropogon furcatus*

those impacts.

5. We believe that as we move toward an ecologically sustainable lifestyle we must recognize that our actions are not only for the benefit of ourselves and the environment, but also will serve as visible models for all other people.
6. We support and encourage the intergenerational sharing of ideas.
7. We believe that a truly ecological lifestyle transcends the divisionary boundaries of residence, occupation, spiritual belief, color, age, sex, and other differences among people. We encourage each person to break down these barriers.
8. The government and its regulations should encourage and not hinder the establishment of ecologically sustainable communities.



Indian Grass  
*Sorghastrum nutans*

9. We encourage citizens to actively participate in public and private organizations which support the establishment of sustainable communities.

10. We encourage individuals and groups to pursue lifestyles using renewable, life-sustaining energy sources rather than nonrenewable and destructive sources of energy, and by taking particular actions such as recycling of goods and materials, engaging in urban agriculture, and utilizing low-energy transportation systems.

### Actions

The Ecological Living Committee proposed the formation of a skills and information exchange network to enable persons with experience in various aspects of ecological living to share their knowledge with others seeking to change their lifestyles. Combined with the barter network proposed by the Economics and Barter Committee, the seeds were planted for the sharing and trading of ideas, wisdom, services, and tangible products among the people of the watershed. The information collected at Camp Hammond will be mailed to those on the KAW Council mailing list. This information might be updated through a KAW newsletter, existing newsletters, or by other means.

## FOOD AND AGRICULTURE

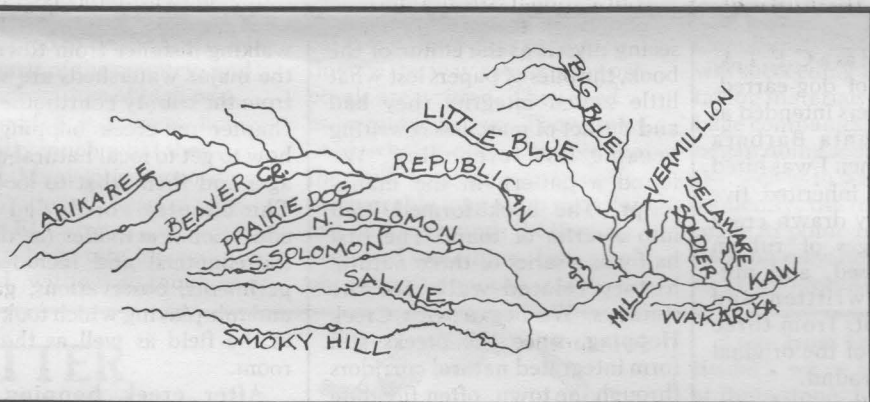
### Resolutions

1. We believe in establishing sustainable farming methods in a more localized agricultural system incorporating small farms, which give new life to our land, which will sustain ourselves and future generations, and which will rebuild and replenish our soil, rather than deplete it.
2. We encourage the expansion of local food production and the development of local organic growers associations and marketing cooperatives throughout the region.
3. We propose that KAW represent the interests of the consumer by furthering the development of commercial organic farming through lobbying and advocating state and federal research and educational support. We further propose that members of KAW actively encourage the production and consumption of organically grown foods in their communities.
4. Because the present system of organic waste disposal pollutes the environment, wastes energy and depletes the soil, and because current practices effectively restrict the use of alternatives and contribute to the aforementioned conditions, we propose that agricultural waste be seen as a resource to be used in support of a sustainable agricultural system whenever possible.
5. We encourage greater cooperation between rural/urban and producer/consumer interests in labor, marketing, and political support to the benefit of the entire region.
6. We believe that the environmentally sound use and propagation of this region's most productive natural resource, its rich prairie soils, is essential to the health and life of this region.

### Actions

In light of the strong need for producer and consumer education, individuals and groups are encouraged to lobby for:

Continued on Page 6



was to form a set of resolutions that we, as participants, feel can lead us toward a more ecological and sustainable way of life within our watershed. After introductory talks by David Haenke of the Ozarks Area Community Congress and Dana Jackson of the Land Institute, the large group divided into nine interest areas which discussed their topics, reported back to the large group, and formed a set of resolutions. KAW Council's last group activity was the adoption of these resolutions. Agreement by consensus was reached on all final resolutions showing thoughtfulness in their formation and a spirit of cooperation during their adoption.

These resolutions are the basis for actions we can take as individuals, as a group, and as part of other organiza-

tives such as barter, trade, and cooperative enterprise, with the emphasis on locally owned and operated businesses that provide an economic multiplier effect for the local economy.

2. The Council will help develop cottage industries of products and skills, primarily for commerce within the watershed, but, where necessary, for export outside the watershed to procure essential goods and services. In this context, we will support all locally owned and operated businesses, including co-op ventures, that prove responsive to the local community. For existing businesses that are highly dependent on exporting their product or service, the Council will encourage and assist them in developing local markets.

3. The Council will strive to reduce energy costs and create jobs through a program of education and cooperative labor in the areas of resource conservation, solar applications, appropriate technologies, and natural and wholistic products and services.

4. The Council will educate people about our economic dependence for our livelihood on the military/industrial complex.

### Actions

1. By developing an ongoing barter directory, the Council will promote the formation of a trade network of producers and consumers for efficient distribution of goods and human resources.

2. The Council will investigate



Little Bluestem *Andropogon scoparius*



1. For a strong research and educational support program from Land Grant, Extension, and other public institutions in support of small farms and family farms.

2. For state supported programs that would extoll the virtues of locally and state grown produce to help educate the consumer.

3. To target particular institutions (schools, day care centers, charity organizations, etc.) to buy locally grown produce and grains.

4. To encourage chain stores to buy local, and support groceries who do over those who don't.

5. To write congresspeople to support H.R. 5618, the Organic Farming Bill of 1982, introduced by Rep. Weaver of Oregon.

6. To make these issues that candidates have to address in local, state and federal elections.

7. In order to save the family and small farmer, a topic of discussion that should be raised by individuals is: what methods should be used to help chemical farmers make the transition to a more sustainable agriculture?

- Subsidize the transitional years
- Tie loans to conditions promoting sustainable agriculture, loan subsidy, etc.

- Research on marketing strategies for the small farmer

### Arts, Communication and Education

#### Resolutions

To build awareness of the Kansas Area Watershed as a community and as a region, through personal and group action we will:

1. Promote arts and culture that reflect our bioregion.

2. Become resources ourselves for our communities, schools, churches, clubs, and groups.

3. Conduct workshops on any topic we feel comfortable with such as edible plants, lost arts, history, culture, tra-

ditional land use practices, diet, building, living experiences, skills, recreation.

4. We will personally work on listening and speech communication skills.

5. We will support open schools, one-room classrooms, apprentice and field-learning approaches to education.

6. We encourage neighborhood building as an important unit of watershed.

7. We support personal contacts as the form of revival, retrieval, and preservation of lost arts, personal history and culture. We will invite people of all ages into our homes and organizations to talk, share personal histories and culture, sing, tell stories, and share information. We will extend to neighbors of different cultures by home visits, food sharing, and cross-cultural sharing.

The Peoples Almanak was a group of friends who met once a month in various parts of the state in homes to have potlucks and information sharing and exchange. We endorse this as a viable structure to get folks together.

8. We encourage the experience of personal contact with other people, animals, nature, and the great spirit as the ultimate re-creation and will continue to liberate ourselves from the passive consumption of mass, so-called entertainment provided via electricity and the consumer ethic.

(We have avoided electric media issues for now. We will consider this later.)

9. Art can extend into anything; let work become art, let us find meaningful work and work at it with consciousness. We especially promote work with the earth, and earth arts such as vegetable and flower gardening.

10. We will all learn some traditional stories to tell from personal contact. If it is not possible to learn this way we will learn stories from books but the object is that we will know stories to tell others, children and adults. We will learn how to speak from the heart, we will help create and continue to create

## 4th WORLD: 2nd ASSEMBLY

At the initial Fourth World Assembly in London in 1981 there were obvious differences in emphasis among the groups who answered the call for a new movement to represent "small nations, small communities, and the human spirit." As a result many of the 400 representatives—whose interest ranged from ethnic rights, bioregionalism, village preservation, communes, animal liberation, and human scale to disarmament—left the First Assembly feeling that neither working sessions nor the Declaration of the Fourth World (unfortunately written before the Assembly) were adequate for stating their positions or resolving differences. One point of agreement was that a Second Assembly would be called in Berlin in August 1982. Some critics of the first meeting have awaited the outcome of the Berlin Assembly to decide if the Fourth World is another talking society or a genuine forum for initiating political action.

The Berlin convenors took steps to favor a productive gathering by restricting attendance to 200, requesting that these be members of active cooperative communities, and holding meetings on the site of a working collective, Fabrik Commune. Less than 100 people came through the Second Assembly, and most were from West Germany, but the resulting statements are generally more pointed toward specific positions and actions than those of the initial gathering.

If you would like a full statement of the Second Assembly report write to Fourth World News, 24 Abercorn Place, London NW8, England. Or contact Fabrik Commune, Victoriastrasse 13, D-1000 Berlin-Templhof, West Germany. —Peter Berg

situations in which young to elders can share what they know through personal meetings, workshops and social events and help provide the framework to do this. KAW Gatherings are a living example of this. We further encourage a bioregional chatauqua to focus on cultural resources.

11. Artists give people back their ability to perceive. Artists need an audience (meaning artists in the broadest sense—kinetic, visual, and aural). We encourage every person to develop their artistic potential and their observational and perceptual skills as members of an audience who will encourage artists.

12. We will do all of the above with love and a sense of humor and an openness to diversity.

### Actions

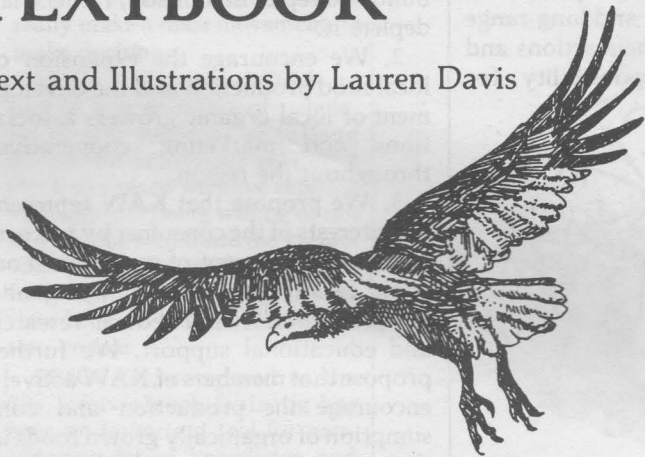
If we decide to have the KAW Gathering as an ongoing event we may consider this: We will learn stories, songs, chants, and dances to share at the next KAW campout (and to share at other gatherings). For the next KAW campout we will bring ballads, visual arts, mime theater, dances, puppet shows, chants, nature facts, and much more to teach and share with all. We especially encourage expressing our stories in some form to involve all ages.

We throw out the possibility of this developing into a traveling educational-cultural troupe. We will conduct environmental workshops for kids at the next KAW Gatherings.



# STALKING THE BIOREGIONAL TEXTBOOK

Text and Illustrations by Lauren Davis



*It takes a special eye to peer under the urban overlay that prevents us from envisioning "what went before" and spotting the long term continuities that remain to be fostered. To apply this talent to creating a textbook with a bioregional focus is an innovative step toward passing along to our children a place-related vision of home.*

*Taking on the modern camouflage of Santa Barbara, California, Lauren Davis has done just that. She describes how she stalked the material for the book and the fun of encouraging children to creek hop and slough slop their way to rediscovering the natural, historical, and regional connections to place.*

—Robert C. Watts



The morning fog had dissipated, the tiles were cool beneath

me, and there was a streak of bicycle grease up the inside of my right calf. People were moving up and down the sidewalks on heels, wheels and zories. Occasionally a dog trotted by, stopping to sniff the bottom of the drinking fountain. It was all there, piece by piece. I had turned the book in yesterday after two years of editing and drawing. It seemed as though I gave the meticulous secretaries at the County my soul but then I discovered it was still all right here on the city streets.

The book started as a C.E.T.A. grant and a pile of dog-eared, coffee-stained papers intended as a textbook on Santa Barbara Urban Studies. When I was hired on as the artist I inherited five pages of previously drawn creek bugs, two packages of rub-on letters partially used, and miscellaneous handwritten and typed manuscripts from three sources. Only one of the original writers was still around.

The fact that the work was scattered and mismatched distressed me at first (I was only the illustrator and here it was an editor's nightmare as well). Later the lack of organization became a blessing as we reorganized the whole book and turned it into a bioregional textbook for the students of Santa Barbara. We called it *Santa Barbara: A Scavenger Hunt of Natural and Cultural History*.

In more philosophical moments as we sat on the floor surrounded by a slough of papers and half-finished illustrations, it occurred to us that a textbook written from a bioregional perspective was potentially a long-term tool for developing a sustainable, place-oriented community. Obviously, the more the children knew about their natural and cultural home the more this home would influence their future interests, studies, work, and sense of responsibility involving this place. Ironically, our textbook was designed to inform children in school about regional knowledge that in our area had traditionally been passed down in the family network. What began along our coast as advice on hunting and gathering techniques and mythic history evolved into lessons on zoning laws, downtown redevelopment, disruption of local natural systems, and the Spanish colonial period of our once sleepy pueblo.

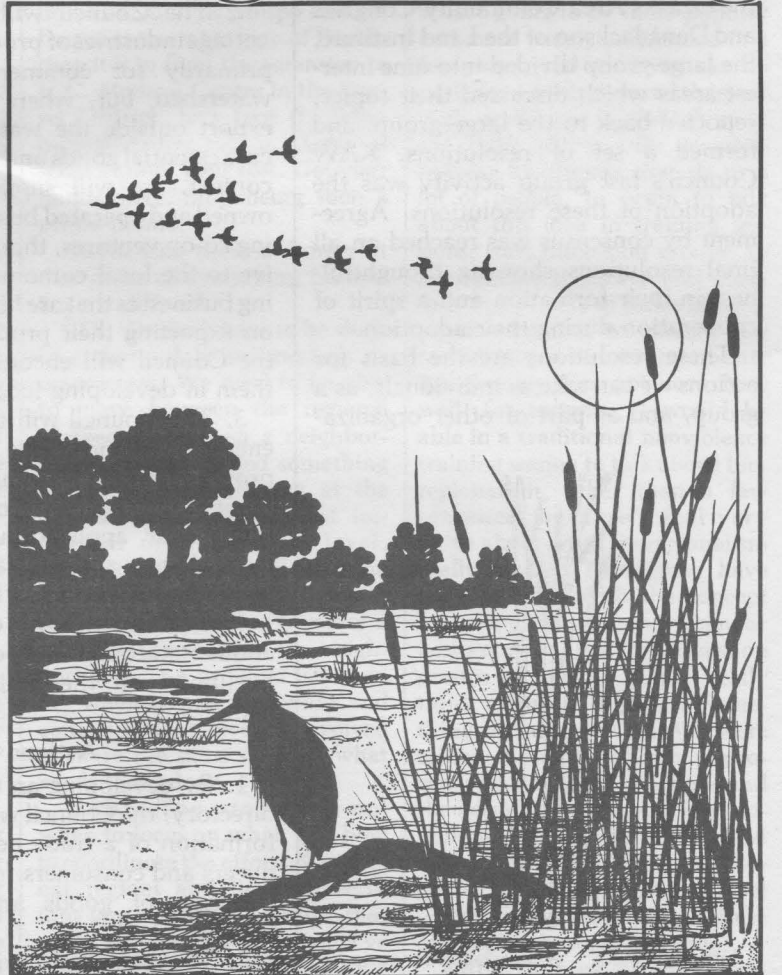
When I finally braved-up to

seeing myself as the editor of the book, the piles of papers lost what little sacred integrity they had and the act of merciless rewriting became less foreboding. We found a pattern in the manuscript. The book formed itself into a series of tours. The first half was a series of three natural history related walks for the students. We began with Creek Hopping, since the creeks still form integrated natural corridors through the town, often flooding parts of the urban areas each winter. Many creeks are within

walking distance from town and the major watersheds are visible from the county courthouse. The chapter on creek hopping told how to get to local natural drainages and then what to look for. The chapter concluded with educational activities (as did all the chapters) and included experiments, observations, games, and role playing which took place in the field as well as the classroom.

After creek hopping, we worked downstream to the Goleta Slough, which includes

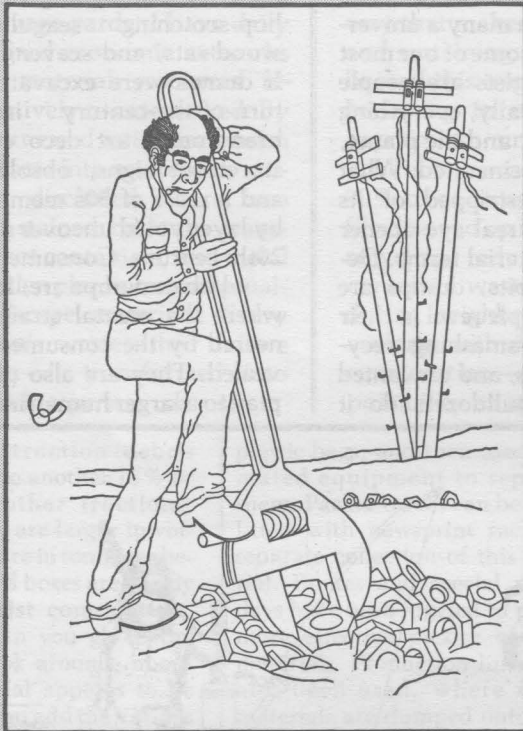
## Slough Sloshing



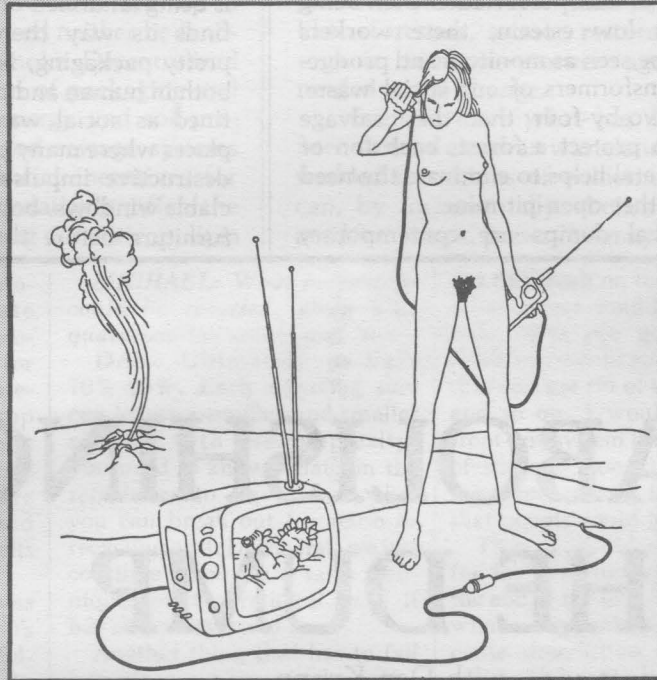


MICHAEL MYERS (1948-1982) CREATED IMAGES OF SUBTLE IRONY CLOTHED IN GRACE FOR ALTA CALIFORNIA EVENTS, CAUSES, AND GROUPS INCLUDING PLANET DRUM. AS A MEMORIAL AND TRIBUTE, HIS ILLUSTRATIONS APPEAR THROUGHOUT THIS ISSUE.

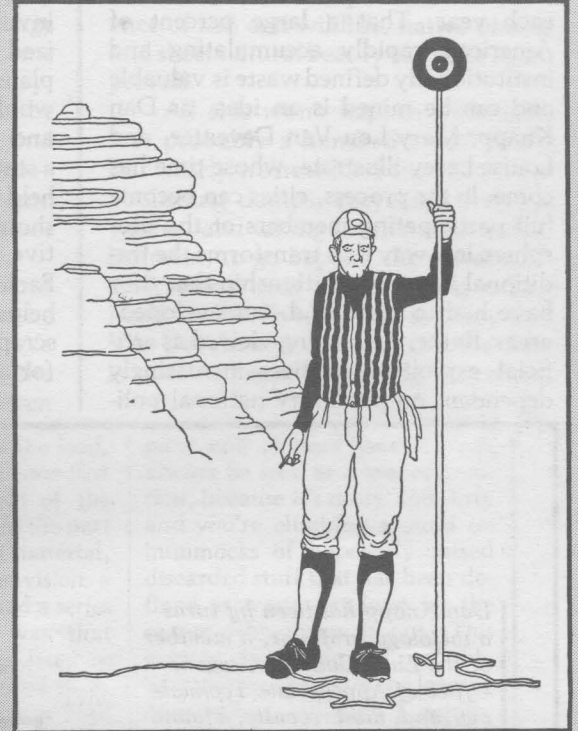
## MICHAEL MYERS



Harvesting Nuts in Northern California



Madonna of the Geysers



The Rules of the Game

WAKE  
for  
Michael  
+  
Aug 13th 2  
Lovers  
Lounge  
WAKE

Michael was born in Madison, Wisconsin, a city of trees and lakes. He lived on the edge, alongside the fields of abundant growth which included what we call "wild life," for which we now seek to provide protection.

He came to Liberate Berkeley, got juggled, and wound up Harvesting Nuts in Northern California.

In the third spectacular crash, he sailed off the edge in a green '51 Dodge pick-up, flipping to the bottom of the canyon, and, alive for awhile, lay in the water ponds of a creek overhung with laurel.

A route bier float on July 3, 1982.

—Holbrook



the Santa Barbara airport. The classes had to gain permission from the airport authorities to visit the slough estuaries, but it gave us a chance to talk about the impacts of human systems on natural systems. We included a natural history section on bird and plant life and an activities section.

Continuing down the watershed, across the highways and parking lots, we came to the coast. We explained how tides worked, what plant and animal life to look for and identify in tide pools, and the why's and how's of tar-collecting on foot while traversing a Santa Barbara beach. We talked about how petroleum had shaped our community: from the asphaltum sealant used by the Chumash on their ocean-going *tomol* craft to the Santa Barbara oil spill and current drill rigs silhouetted against Santa Cruz Island like rigid, metal whale spouts in the distance.

The second part of the book dealt with Santa Barbara's cultural history and its impact on the natural region over time. We called this part of the book *City Streets* and broke it into three walking or biking tours for students in downtown Santa Barbara. Each tour started with a Chumash site and gradually walked its way through the Spanish mission period, the Mexican ranchos, the arrival of the Yankees and Santa Barbara's early period as a resort town.

Activities for *City Streets* included urban scavenger hunts which required the students to head out in pairs to find the treasures on their lists and write down their addresses. A usual list included:

#### FIND:

1. An example of R-3 zoning.
2. An example of Victorian architecture.
3. A pre-earthquake structure (1925).

4. A business that's been in Santa Barbara for over 25 years.

5. An example of Spanish colonial architecture.

6. The block in which downtown redevelopment stops going toward the harbor.

7. The cross streets that mark the center of town.

8. A bus route that goes up to the Mesa.

9. The Planning Commission's office.

It usually took the kids one hour of class time and an hour of lunch to finish their lists. They often ran the whole way stopping to munch their lunch while talking to store managers and trying to find out how old the businesses were. Sometimes they told stories of sneaking up to the porches of converted Victorians in an attempt to count how many mail boxes there were (R-3 or R-5 zoning?) and casually wandering into the McDonalds to ask what kind of architecture the building was.

Throughout the three years we spent on the book, we dug up many sources of regional information that would be helpful to a community wishing to put together their own bioregional textbook. One of the first issues that came up was funding for the book. We squeaked ours in during the death throes of C.E.T.A., putting in three more months of volunteer effort after the grant money disappeared. New sources of money might be found in the California State License Plate Fund or the National Endowment for the Humanities which offers grant money to support curriculum development in individual schools. It may also be possible to receive support from private grant foundations as a community improvement program. Funding may take some creativity.

But who would publish the book? In our case the Santa Bar-

bara County Schools published and printed the book without charge. The county distributed copies to all the county schools and gave our private school several hundred copies in exchange for our labor. The county has been slow about getting the books printed, though, and they will not be able to print copies for nonschool sales of the book. Public demand for the book seems to be very high; we are considering publishing additional copies ourselves so the book can also be sold in bookstores and the natural history museum gift shop.

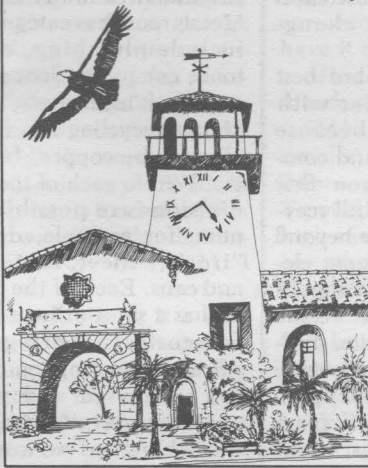
In researching, we found many unexpected sources of information in addition to the local historical societies, natural history museum, and botanical garden. The Santa Barbara Board of Realtors, for example, had commissioned a community historian to write pamphlets on each major community in Santa Barbara, with photographs. The photographs often served as references for illustrations for our book.

We found more in the photographic archives of the University of California at Santa Barbara Special Collections Library. It included boxes of black-and-white prints of everything from the earthquake early in the century, to huge resort hotels, to early agriculture—pampas grass harvests in a field near what is now downtown. I spent hours boxed in the windowless room thumbing through the prints. The old ochre prints gave me ideas of what to draw for the book and made the old stories of Santa Barbara seem more real than the Safeway parking lot where exotic trees had once grown around the base of the old Arlington Hotel. After those stuffy afternoons, I'd see the town differently.

I began to live in three periods of history at once because the relics were all piled one on top of the other. I'd walk around the

neighborhoods and see the old pictures before my eyes. I knew what had been added to the scene since the photograph because that object or building would appear in color. The old landmarks would still have a hint of

### Santa Barbara: A Scavenger Hunt of Natural and Cultural History



that old yellow patina. I realized that I could choose to notice the fast-food chain, or the hand-cut native sandstone blocks that lined the curb. Before finishing the book we walked everywhere; it was the only way to visually understand the neighborhoods.

We used street names to explore community history. Santa Barbara names come in three languages: Chumash, Spanish, and English. By translating and researching we began to see not only historical, but also geographical patterns to the names—patterns tangible and exciting to the students. Some examples include:

*Yanonali*, a Chumash leader; *Laguna*, once along an island estuary which is now just a long, shallow depression from the high school to the bird refuge; *Nopal*, named for the *nopal* (cactus) that still grows in the gardens along the street.

A way to get free research labor is to get the kids doing oral history projects as part of class. If they are learning a foreign language in school, get them to practice it by talking to members of the community from other cultural backgrounds. In our case knowing Spanish was very useful, since this was still the dominant language in many parts of our community.

We found that the book took much longer than we thought it would. Once we had the structure of the book (that is, the tours), it just grew richer over time as our awareness of place increased. We found it best to be able to work full time on the project at the end, especially during the layout and pasteup when integration was necessary. However long one thinks a project such as this will take, add at least another three months of full-time work, and three months for procrastination.

Burnout was a problem. I usually dealt with this by riding my bicycle around for two days just looking. I wouldn't even bring a pencil and pad of paper.

In the end, everything was in the book. I'd go downtown and sit on the cool tiles, a pigeon would clumsily plummet down from a red-tiled roof, the courthouse chimes would ring, the drinking fountain would shoot up another unsuspecting person's nose, the mail box would be visited by yet another dog, the kids would get out of school and crowd down the patterned sidewalks in threes, the palms clattered as a delivery truck went by, and the figs on the tree in front of the bank got bigger and darker. "Ha!" I thought to myself, "You're all in the book!"

#### Contact:

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The greatest untapped resource in America lies not in our wilderness and rural areas, but rather within the solid waste stream of the urban centers where over ninety percent of us live. In the San Francisco Bay Area alone, for example, over 590,000 tons of trash are generated each year. That a large percent of America's rapidly accumulating and institutionally defined waste is valuable and can be mined is an idea, as Dan Knapp, Mary Lou Van Deventer, and Louise Lacey illustrate, whose time has come. In the process, cities can become full participating members of the biosphere in a way that transforms the traditional imperial relationship that they have had to rural and "undeveloped" areas. Rather than being viewed as artificial exploitive entities—increasingly dependent on predatory national poli-

tics—cities can claim an honored place as part of the watersheds and bioregions within which they naturally reside.

But this transformation will require the development of social institutions and policies that reward urban resources conservation and provide status, prestige, and income to the people involved in it. Only a society mesmerized by the fossil-fueled rhetoric of planned obsolescence and affluence would consign scavengers, recyclers, and dealers of second-hand goods to a status of disrepute. Rather than being held in low esteem, these workers should be seen as monitors and productive transformers of our social waste. Each two-by-four that they salvage helps to protect a forest, each ton of scrap metal helps to eliminate the need for another open-pit mine.

Local dumps are contemporary

archaeological sites from which we have much to learn. A week perceptively spent there provides a richer social education than a year in many a university. Not accidentally, some of our most informed urban ecologists are people who work at dumps. Daily, everything that is part of America, and the planet, is being landfilled or incinerated. What finds its way there, stripped of its pretty packaging, is a real eye-opener both in human and material terms. Defined as social wastepits, dumps are places where many people revel in their destructive impulses—smashing recyclable windows, bottles, and unwanted furniture before the bulldozers do it

for them. Side by side you will see Asian, black, white, and Hispanic Americans unloading their trash amidst hop-scotching seagulls, scurrying wood rats, and scavenging rag ladies. If dumps were excavated, you'd find turn-of-the-century iron castings, brand-name art deco containers and storefront signs, obsolete currencies, and a mass of 50s memorabilia. Layer by layer you'd uncover a description of 20th century Consumer Americanus.

Urban dumps are, in short, places where the mental straightjacket engineered by the consumer society is revealed. They are also places that give play to a larger human imagination. But

## ABOLISHING THE DUMP

An Interview with Dan Knapp

Dan Knapp has been by turns a sociology professor, a member of the Lane County, Oregon, Office of Appropriate Technology, and, most recently, a founding member of Urban Ore, a Berkeley recycling business. For the past three years Dan has been involved in running the salvaging concession at the Berkeley dump as well as managing a resale yard specializing in used building materials. He is also a solid waste management consultant and author of Resource Recovery: What Recycling Can Do and On Recycling Landfills (available from World Materials Publishing, 1329A Hopkins, Berkeley, CA 94702).

—Michael Helm

**MICHAEL HELM:** Dan, let's talk about an urban platform for dealing creatively with the huge volumes of trash that go into any large urban dump on a daily basis.

**DAN:** Well, the first thing you should do is find out what is there. For that you need a composition study that is thorough and comprehensive. The composition study will indicate what can be mined or split off from the main waste stream, what the value of the different substreams is, how the volumes change from season to season.

Composition studies are best done by people familiar with recycling at landfills, because trash is such a chaotic and complex substance when you first view it as a whole. Landfill recyclers have learned to see beyond the chaos to the constituent elements, each with its own range of value based on future use. People who do landfill composition studies quickly see the need to develop master lists of categories. My own list has about a dozen—from metals and paper to soils, brush and rock, to containers and building materials.

After sampling the waste stream physically and separating it according to the master list, you need to measure the weights and the volumes of each. Computing the economics is then a matter of multiplying these through by the range of market prices currently being paid for the individual material. I say range of prices; it really helps if you have enough experience to see the value of a thing in the various transformations that you can work upon it. Mixed, unseparated metals are worth something, but not very much—around \$20 per ton. But if you work with them and upgrade them—in the mining industry it's called beneficiation—you can expect to get a lot more money.

**MICHAEL:** Let's get more specific. Take Berkeley's dump. What kinds of categories did you see in the trash flow that exists there and what is Urban Ore do-

ing about them?

**DAN:** A kind of discipline was forced on us in Berkeley: we had to make recycling pay from the very first day. We couldn't afford a composition study, but I had already done several up in Lane County, and I think that helped. One of the first categories we went after was metal. That's because metals have a well-developed market with known specifications, and separations can be done with hand tools. The first thing we did with metals was to separate further into reuse and recycle options. Reuse meant setting the metal object in a salvage area for sale at whatever price we could convince a buyer to pay—usually more than scrap. Recycle meant dismantling and sorting according to scrap industry specifications, so the metals could be melted and made into something new.

Both reuse and recycle divide further into many categories. Metals reuse has categories which include plumbing, electrical, tools, car parts, door hardware, motors, fans, heaters, and more. Metals recycling has iron, steel, aluminum, copper, brass, lead, etc. Within each of these further divisions are possible. Aluminum, for example, divides into "irony," sheet, cast, extruded and cans. Each of the other metals has a short or long list of subcategories that bring different prices depending on how they are separated and prepared.

Metals set the pattern for everything we've worked with since. Materials are first divided into reuse and recycle, and then further definition and refinement happens within each subcategory. Starting with a list of about a dozen major material subflows, it is possible to derive hundreds of commodities that could be harvested from the trash.

Let's take dimension lumber as another example. If you are going for reuse, you'll want to de-nail, square, size, and sort the material. The wood that is too splintered, rotten, or dirty for reuse can then be prepared for firewood, or it can be chipped for fuel, compost, or even mulch. One big batch of wood that I know about, an accumulation from several years of operating a salvage business, was recently crushed and shipped to an alcohol-fuel still for use as a heat source for distilling. That's a higher use than landfilling or garbage incineration, in my opinion.

One of the things about dumps and mass incineration facilities

that we're criticizing right now is that they are one-shot, one-hole solutions. In the case of the dump, you find a piece of land that's lower than everything around it, and you fill it up with mixed wastes. In the landfill, everything becomes one thing: garbage. It's the same way with burn plants. They are one-hole solutions. Everything is pushed through a door and fired up and some of the energy is extracted. It doesn't matter how complex the composition is; it is treated as if it were the same.

With recycling it's different. You want to make the most possible separations that you can. A good rule of thumb is that the more you separate, the more the value increases.

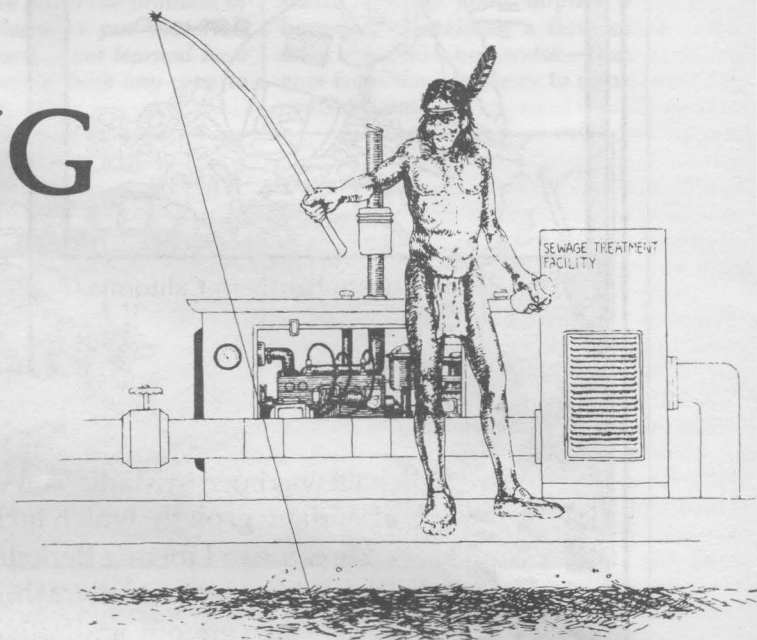
So our platform for dealing creatively with trash becomes a matter of separating materials appropriately, having a place to put every discrete material, and having a treatment process waiting for it when it gets there.

**MICHAEL:** How about giving us some idea of how much more you can expect to get if you work with the material?

**DAN:** In the case of metals, when they're mixed they sell for \$15-\$25 per ton. A few places have gotten as high as \$40, but that's probably the upper limit. In other words, mixed metal is worth from 1 cent to 2 cents per pound, hardly enough to pay the cost of collecting it. But with further separation, grades of iron and steel can be pulled out that sell for \$50-\$90 per ton, aluminum for \$300-\$600, and copper for over \$1000. You can lose a lot of money by not separating metals right.

**MICHAEL:** And the same is true for lumber?

**DAN:** The same is true for lumber or just about anything else. If you just take a bunch of lumber and throw it all in a big pile, it's not very appealing to anyone. Somebody might come along who wants a few two-by-fours, for example, but if they're down at the bottom of a jumbled pile, no one will go to the trouble of pulling everything else off to get it. So your pile of lumber will probably wind up being cited for rat harborage or fire hazard before you make back the cost of recovering it. So what you do is, again, to separate, clean, and sort the material into neat and orderly piles. All the two-by-fours go in one place, all the four-by-fours in another. To get really top prices, you should also separate according to the type of tree the wood



was made from. Redwood is worth more than fir here in California; it has a great reputation because of its resistance to rot. If you're in the Midwest, you'll get more hardwoods. If you're in the Pacific Northwest, you'll get fir and pine.

**MICHAEL:** Why don't you give us a percentage analysis of the large-volume substreams seen at landfills?

**DAN:** At the Berkeley landfill, about 30% of the total volume, for example, is brush and other plant debris.

**MICHAEL:** Is that useless?

**DAN:** Not at all.

**MICHAEL:** What can you do with it?

**DAN:** If you can get it broken off from the rest of the waste stream and put it in one place, then you can cut the larger limbs into pieces that you can sell for firewood. You can shred the remainder of the woody parts and make wood chips. There are places that are really looking for wood chips to burn right now. But chips also have other potential uses.

**MICHAEL:** Like composting the way you guys are doing.

**DAN:** Composting is a good use, especially for green brushy material. Another urban use is as a "bulking agent" for sewage sludge, which means providing a habitat platform for organisms to live on as they're turning the rich nutrient solids from sewage into humus.

**MICHAEL:** Then what would happen to that material? Would it be used in the soil?

**DAN:** Humus is soil. It's often called a "soil amendment," but I think this expression is kind of funny, because humus is what soil is. Humic material is the defining characteristic of a soil; otherwise we call it sand, or dust, or crushed rock.

**MICHAEL:** So you think there is a potential here for economic value; might cities be able to grow food from this compost?

**DAN:** Yes, but only if you keep the operation clean and have the feedstock under control. There is some stuff in the waste stream that you definitely don't want in a compost intended for general

use. As with any other recycling operation, it's a matter of quality control and how you split the plant debris off from the rest of the waste stream. In the case of Urban Ore's composting operation, we're trying to do it as cleanly as possible. We don't want material that has been sprayed with herbicide, for example. We remove any trash contaminants such as paper or plastic.

It's interesting to note, though, that composting may have some applications even for fairly contaminated materials. There is some evidence in the composting literature that suggests herbicides and pesticides are broken down into less harmful substances such as salts.

But we're producing a clean material intended for general use right now. Some of what we get is already useful. We have some piles of shredded eucalyptus, for example. We get occasional loads of compressed alfalfa—spilled horse food that's a great plant booster or mulch. We have a good-sized pile of mushroom compost. All of these are for sale right now. The nearest source of topsoil other than our operation is ten miles down the freeway, and for many local landscapers, that's a long and costly trip. We think there's a big advantage in being able to bring in a load of brush and leave with a load of finished compost.

You asked about the economic value of compost. Like all other commodities derived from recycling, it varies. I did some calculations last year on a compost product I had purchased for resale. It was a bagged fish compost made by a company on the coast. They were mixing fish remains with ground-up redwood bark, letting it pass through a compost heat cycle, then selling it by the cubic foot. At three dollars a bag retail, that fish compost was worth \$250 per ton, about equal to the lower grades of aluminum, and considerably higher than household recyclables such as cans, bottles, and paper.

**MICHAEL:** So, 30% of the wastes that enter the dump are compostable. What is another big category?



# THE TRASH

Helm

first you have to get past your preconceptions and the no-salvage taboo.

As one who has worked around dumps and salvage yards, I have daily seen decentralized economic networks develop and material resources recycled and creatively re-categorized. By turns I have witnessed artists transform industrial artifacts into sculptures, students convert discarded doors into desktops, rust-stained bathtubs transformed into plant containers, and metal pipes and wooden planks reconceptualized into landscape materials. Every day one person's waste—their failure of imagination—is transformed into something another person can use.

DAN: Construction debris might amount to another 15% or more. Some other fractions, like cardboard, are larger in volume than they are in tonnage, because cardboard boxes are sturdy enough to resist compaction. Sometimes when you go to the landfill and look around, about half the material appears to be cardboard. If you add the various kinds of paper to the cardboard (some recyclers call this category "fibers"), then you're talking about another very substantial part of the waste stream, probably 25%-30% of the total. Paper divides into a myriad of categories. It's surprising, but reuse is an option for some of what you find—books and some magazines, for example, or file folders that aren't too beat up. I recently found several reams of good-quality typing paper still in their wrappers; I gave some away and kept what I needed for the next couple of years. On the recycling side, computer paper is quite valuable and can be sold readily even when other grades of paper are not moving. There are various uses and markets for newsprint; some is made back into newsprint, some into cellulose insulation.

MICHAEL: Then there are all the household items, building materials, and that sort of thing.

DAN: Ignoring for the moment that there is some overlap with the earlier category of construction debris, these might amount to 10%-15% on any given day. Another big category, especially if you're going by weight, is soil. Also, all landfills get lots of inert materials such as roofing or broken concrete.

MICHAEL: Can roofing be recycled?

DAN: It's burnable, but it would be an incredibly dirty fuel with lots of ash, and I doubt that anyone would want to burn it. It might be good for building roads. They use it at the landfill now to cap a previous fill and make a platform for the next "lift," as they call garbage when it begins to form low hills. I might add that concrete can be crushed and made into aggregate suitable for fill or road-building as well.

MICHAEL: What about just plain old classic garbage? Can anything be done about that?

DAN: The most grossly mixed garbage you'll generally see at landfills comes in packer trucks. At the Berkeley landfill, this fraction accounts for roughly 30% of the total tonnage. Again, there is overlap with some of the previous categories—about 50% of the packer truck wastes are paper and cardboard, for example, so please don't chide me for percentages that add to more than 100. It takes a different kind of list to include everything with no overlap.

Anyway, there are various systems capable of at least partially unscrambling even this stuff. Bottle deposit laws, for example, seem to remove between 5% and 10% of the volume right off. A system that was tried with success back East puts metal and glass containers together into

We have an opportunity to apply our creativity and idealism—via the economics and politics of trash—in a way that makes our cities adventurous and sustaining places to live. The outlines of this transformation are already beginning to emerge in terms of an appropriate urban platform for the abolition of waste. Reconceived, up to 90% of our trash need neither be land-filled nor go up in smoke. Decentralized recycling, reduction of packaging and container waste, energy and soil-producing neighborhood sewage systems—along with financial incentives for conservation—cumulatively offer the possibility of making our metropolitan

plastic bags, and then uses automated equipment to separate them. Packer trucks can be retrofitted with newsprint racks for separate collection of this material. Routes and special pickup days have been juggled to permit more effective pickup of clean materials. Production lines have also been used, where mixed materials are dumped onto belts and people handpick them.

My personal favorite was Garbagio's system. Garbagio's is a recycling and garbage collection company based in Eugene, Oregon. Their system for household wastes was ingenious, comprehensive, and it worked. Customers regularly and reliably separated household wastes into food remains, metals, glass, and fibers, including rags and cardboard. The company had various methods of training their customers, including a humorous "report card" indicating whether the customer was doing things right or wrong, and what could be improved.

Another thing that could be done is feeding waste food from produce markets and restaurants to hogs. That used to be done in Los Angeles.

MICHAEL: Do you have any idea what percentage of the waste stream is being recycled right now in Berkeley?

DAN: The figure that was bandied about before we opened

MICHAEL: What percentage could be recycled, given adequate capitalization and time?

DAN: Ultimately perhaps 70%-90%. Each recycling success leaves a smaller and smaller residue, with less complexity. You need to know what's in the remainder to figure out what you can break out for reuse or recycling next. In general, we just continue to apply the same techniques on the residual until it has shrunk away to zero.

Another thing that has to fall into place is access to the material. Access is something that may be very difficult to get, because there is often a no-salvage rule, or there may be a prejudice against salvage businesses or exclusive disposal franchises that effectively prevent recycling. I think it's possible to work around and through these barriers, and I know many people doing the work of breaking them down. A lot of these barriers seem quite artificial and indefensible in the changed economic context of the eighties. We can't prevent people from harvesting resources from the waste stream and simultaneously complain of resource scarcities; it just doesn't make sense.

MICHAEL: You've often used the phrase "front-end" recycling, and I've gotten the idea that "front-end" systems might eventually eliminate the need for

areas economically and even agriculturally much more self-sufficient.

With increasing energy costs and the decline of available urban space for ever more landfills, conversion of America's mounting solid waste stream into a major urban resource is not just an idealistic vision but increasingly a practical reality. Rather than garbage production, recycling can become urban America's primary industry. Those who get involved now in the solid waste stream will not only find good livelihoods but will also become—like reforesters, salmon restorers, and organic farmers—pioneer agents of needed social change.

Even further, what has hitherto been defined as urban wasteland can be wedded to notions of wilderness. We can, by incrementally abolishing the need for dumps, preserve—even

reclaim—the amount of land available for multi-species habitation within our cities. Marshes, bay fronts, and stream beds—all places where dumps are now sited—can be enhanced, as waste-generated pollution is abated and habitat restored. Instead of bulldozers, dust, and trash compactors, the presence of fish and wildlife, native plants, and sheer natural beauty can once again prevail.

All this won't happen overnight. It is probably a hundred years' work. But clearly we now have the vision, via abolishing dumps, recycling chemical wastes, and taking on the trash establishment, to go beyond the current despair about our deteriorating urban habitats. It won't be easy, as Mary Lou Van Deventer points out, but the time is now to begin harvesting our trash.

put the brush on top of the load, because that would be your first stop. After you got rid of the brush you would go on to the next stop and get rid of that material, and so on. I would envision a front-end system that had a series of stations along the way that were known and fairly fixed so that people could get used to it.

Then, I would charge a high fee for destructive disposal at the end of the line. That's exactly what's happening anyway, because destructive disposal sites are fewer and farther between nowadays, and it costs a lot to haul anything anywhere. The other destructive alternative, burning, is even more expensive, so the cost of inappropriate disposal is going way, way up and fast.

MICHAEL: So people have more and more economic incentive to recycle.

DAN: Exactly. The fact that recycling has not been paid for the service of disposal that it performs has served to undercut and mask its real advantage. Garbage, after all, is worthless. Recyclables bring income. If recyclers in Berkeley got \$2 for each cubic yard they disposed of—and that's what the landfill charges for burial—then even the lowest grades of paper would be wildly profitable. Bi-metal cans would be a real money-maker.

MICHAEL: Recycling seems to cover a whole lot of activities that people don't normally think of as recycling. I'm thinking of auctions, fleamarkets, garage sales, any kind of institution, including charity, that takes something that's been used and treats it as a valuable commodity.

DAN: Well, the word recycling is only about a dozen years old. As Cliff Humphrey is fond of saying: "recycling wasn't in the dictionary before 1970." He's right. I checked.

What we are seeing is a slow shift in consciousness. Recycling is expanding its share of the disposal function. During the decade of the 1970's, recycling was thought to be fairly limited, mainly concerned with household materials, especially packaging. But now we're using the word in a much broader context, and I think that's all to the good. The concept can be applied to any material, whether it's rocks or tin cans. It has the same idea behind it of conserving materials.

MICHAEL: Let's talk about the social setting a little more, and the economic implications. What has to happen socially as part of this process so that scavenging isn't viewed as something bad, as a low activity rather than a high activity?

DAN: Well, I think a properly designed front-end system would automatically gain the respect of most people, because people respect order and planning. People respect comprehensiveness and they respect hard work. And a good, well-run, well-designed front-end recycling system would be all of these things and more.

On the other hand, scavenging as it's practiced now in our com-

pany and at most landfills will always be seen as a low occupation, because it's dusty and dirty and you're climbing around on hummocks of hopelessly mixed discarded stuff that has been defined as waste—at least by the person who threw it out. This form of scavenging will probably never be seen as one of the leading occupations, although I personally find it interesting and even fun to do. But the transition to the front-end system should be a very instructive thing. Because all of a sudden you'll have this very orderly process and this very orderly system for receiving materials; not just a pit or a pad or a tipping floor.

So the design and scope of the front-end system is the real key to unlocking the resource base, because you have to get at the waste stream before it's mixed so thoroughly that it's no good anymore. Unfortunately, most landfills and transfer stations still mix materials by design. The current disposal system seems diabolically put together in such a way that it will make all the materials that go into it worthless. It doesn't help to call burning for energy a form of recycling, either. The materials may be good as gold, but they are irrevocably destroyed. Burning is materials destruction, not conservation.

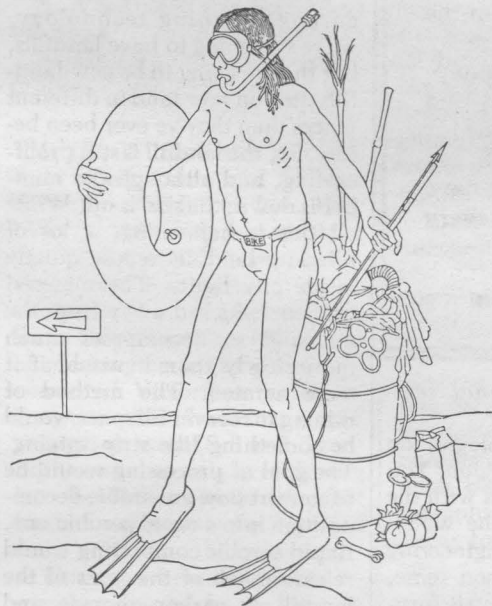
MICHAEL: What is the tipping fee, and how is it used?

DAN: The tipping fee is the fee that is charged for you to come in with your load of whatever and tip it off your truck or out of your car onto a piece of ground and have it put away.

MICHAEL: So the tipping fee is a disposal fee?

DAN: Yes. Tipping fees are usually charged on the basis of uncompacted cubic yardage. Tipping fees are habitually set high enough to pay the complete cost of disposal plus a profit for the operator. In the case of landfills, these profits can be substantial, because covering trash with earth is not all that expensive. Disposal costs jump with distant landfills, and with incinerators. So do tipping fees. So do profits. Tipping fees also tend to anticipate large capital expenditures; high tipping fees are one of the ways new disposal initiatives are financed.

Now let's look at what people want from the service of disposal. Assume you have a big quantity of a number of things you no longer want. They are in the way. You give away and sell what you can, but there are still some left. You decide to take them to the dump. You pay the tip fee and dump your load. When it's out of your sight and mind the minimum thing you wanted to have happen has happened. You paid to get it out of your truck, it's gone, you don't have to think about it anymore. It doesn't seem to matter much to most people whether it is saved afterwards, although there are a lot who think it's good and a few who want at least their own discards to be destroyed. Yet in most communities, the dis-



LINOLITH PRINT BY MICHAEL MYERS

up the composting operation out at the landfill was somewhere between 5% and 10%. That measure supposedly included our operations, the dropoff depot run by the Community Conservation centers, and Ecology Center's curbside pickup program. I have never placed much importance on this figure, however, because recycling is a much broader activity than that. It's built into the way things are done in a way that is very hard to measure. What about backyard composting, for example? What about the Salvation Army, or Goodwill? What about in-house operations like office-paper recycling? I know we've been getting around 20% of the traffic at the landfill to use the composting site; what does that do to the recycling percentage? I'm not sure, and most of these figures seem real slippery.

dumps. Is this possible?

DAN: I consider front-end recycling to be the most cost-effective and appropriate alternative to continued landfilling or other forms of destructive disposal. We say front-end recycling because there has been a tendency for solid waste planning to put recycling at the rear-end of the disposal process, sort of as an afterthought. It just doesn't work as well that way.

The ideal would be a system that is simple and standardized. That way, people would soon learn how to set up their loads so they could take full advantage of it. For example, suppose we design a system where brush and compostable material are received first. You are a hauler and you have a contract to haul three different materials, one of which is brush. Assuming you are familiar with the system, you would



posal fee is used to finance destruction across the board, the more complete the better.

What we're saying is that the system should instead be redesigned to pay collection people for saving the materials and for preparing them for reuse.

**MICHAEL:** Do you think city garbage collectors should be recyclers, too?

**DAN:** Yes, they should be making that transition, and communities should be helping them—requiring them if necessary—to make the necessary changes.

They should be experimenting with ways to use the existing garbage collection equipment to get materials separated and keep them that way. Many of us in recycling have had ideas on how we would run final disposal if we were in charge. There are places, for example, where packer trucks have been used successfully to pick up single commodities. Packers can squish newsprint or cardboard just as well as they can squish garbage.

**MICHAEL:** What should a city do when it's in a position to buy some new garbage trucks?

**DAN:** Assuming that you've done the composition study and have a front-end system in place, then I would recommend a vehicle that is designed to collect specific materials. If you're picking up waste oil then you need a waste oil truck. If you're going after brush then you need something like a covered trailer with a small, relatively noiseless shredder. We routinely use flatbeds, pickups, dump and rolloff trucks in our work, along with forklifts, loaders, and cats.

**MICHAEL:** What about household trash? Can you get it presorted?

**DAN:** Sure. You can have a trash collection system that features collection of separated materials. Here is where creative use of the tipping fee can pay big dividends. What you want is to motivate effective recycling behavior, get people to use your system, and make a living, pay your taxes, and all the rest. I mentioned Garbaggio's earlier: it is definitely a recycling business first and foremost; it was started by some of the most fanatical recyclers I've ever met. But Garbaggio's is also a licensed garbage hauler. Garbaggio's used to advertise free pickup of recyclables, but sale of recyclables paid only part of Garbaggio's costs. The garbage disposal fee did most of it. The disposal fee was based on the number of pickups plus a surcharge for any extra volume. With this financial structure, Garbaggio's was able to grow in a highly competitive situation, where the competition was fourteen already established garbage companies. Without the tipping fee, Garbaggio's would have required a subsidy, grant, or some other source of outside funding. Our new composting operation at the Berkeley landfill has the same financial structure: we sell compost, but daily operations are financed by the tipping fee, which is the same as the landfill charges.

**MICHAEL:** If people could see that it is better to pay people that are "garbagemen" to recycle rather than to destroy materials the way they do now . . . would disposal be more expensive?

**DAN:** I think it would be a lot less expensive on the net cost side, and I think it would be a lot more productive on the benefit side. The current system is organized to destroy "wastes" as rapidly as possible. But the increasing cost of destructive disposal is tilting the economic equation in favor of recycling. Not that some recycling enterprises are not already profitable. They are. Some make quite a bit of money as it is, and we feel we're seeing only the tip of the iceberg really, because we're not doing much in the way of beneficence. We're technologically poor in recycling; there

## HOW TO WASTE CHEMICALS

by Louise Lacey

Imagine that you had to wait at a railroad crossing for tanker cars containing the six million tons of so-called hazardous wastes being sent to rest in authorized holes in the ground each year in California. How long would you have to wait if the cars passed you at six per minute? Almost ten days.

California Department of Health Services and the Governor's Office of Appropriate Technology have decreed that land disposal is an inappropriate method of treatment, and over the next five years, the most toxic chemical wastes—PCBs, pesticides, cyanides, toxic metals, halogenated organics and non-halogenated volatile organics—will be prohibited from all dump sites.

Superficially that sounds like a good idea. No more Love Canals, no more polluted water tables, no more stinking evaporation ponds. But what alternative have they in store for us? It all comes down to incineration, big-time incineration, in centralized locations, at extremely energy intensive cost. But the cost doesn't matter for people like Chemical Waste Management (ENRAC Division), for example, the proprietors of such waste "management" sites as Kettleman City and the Gulf Coast-based Vulcan incinerator. They pass it all onto the customer and make a handsome profit.

The California program will be implemented through Draconian new regulations, a hugely increased enforcement budget, new computer tracking systems of mandatory paper work, and \$5,000 rewards for citizens reporting violations.

Not addressed is the problem created by householders who produce very significant quantities of chemical wastes with little thought to the matter. Hazardous waste is seen as an industrial problem, unrelated to everyday living. Automobile do-it-yourselfers flush millions of gallons of used motor oil into city drains and throw mucky oil filters into the garbage can along with pesticides, household solvents, and broken smoke detectors radiating nuclear waste.

In the meantime, truly appropriate solutions to chemical waste problems, such as properly sited and constructed landfill, and even more important, recycling, are largely abandoned. Yet any system of waste disposal which does not address individuals as effectively as large corporations is doomed to failure.

Recycling is always given lip service, but save some notable exceptions, such as oil, solvents, and a few acids, it is a concept largely ignored.

The oldest (and one of the few) broad-spectrum chemical recycling operations in the U.S. is Zero Waste Systems in Oakland, California. On a typical day Zero Waste will visit a Miracle Auto paint shop where recycled lacquer thinner will be delivered, and a batch of used thinner picked up for reprocessing; send two chemists to a hospital to remove unwanted (but valuable) laboratory chemicals; at their retail store supply to a Berkeley "alchemist" the ingredients of a potion which he will return to sell on the ZWS shelves as Willard Water.

ZWS offers discount laboratory chemicals and equipment, consults to industry and small-scale business and individuals, and provides on-going recycling programs for a diversity of regular customers. Chemists at ZWS say that as much as 80% of all "hazardous waste" doesn't have to be either hazardous or a waste, and they prove it every day.

*Louise Lacey is a Bay Area writer and publisher and has worked with Zero Waste Systems since 1980.*

is vast room for improvement. We need more investment and technical advance to make some of these things pay off as well as they might.

For example, in the case of iron, we know that we can separate out really good grades of iron for remelt, but much of that iron now goes into ships and goes to other countries where they have electric furnaces. These furnaces are great digesters of high-grade scrap; they can accept nearly any proportion of scrap to new material, unlike blast furnaces. But there is very little of this technology available on the West Coast where we are, so there is not much capacity for dealing with the resource that we are capable of generating.

**MICHAEL:** That's a very interesting prospect. To the extent that what is now called the waste stream is recycled, you build up an inventory of materials to the point that you have a resource basis for a larger degree of regional economic self-sufficiency. Might it make sense then to build one of these electric furnaces here in California rather than ship it to Japan? What are the implications

in terms of bioregional self-sufficiency?

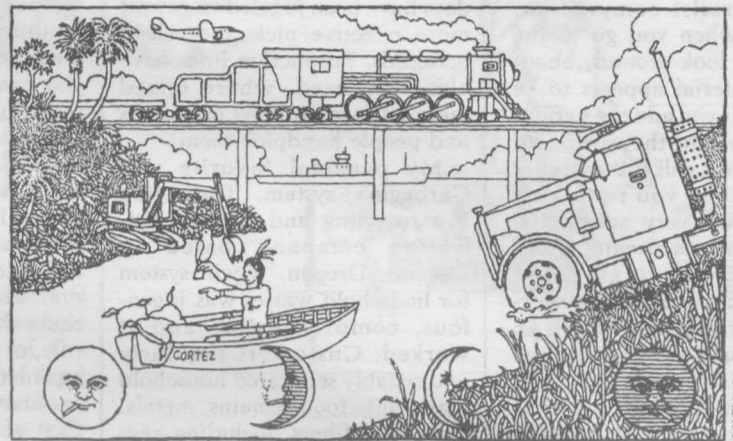
**DAN:** What technologies do you want for your bioregion? You can build many of them with the materials that are in the waste-stream. But it takes engineering and it takes design, good sense, and good taste. One electric furnace that was set up in New England takes almost 100% scrap; they collect old motor blocks and other parts and make them into wood stoves. The stoves they make are really tops in design and price: some of the best that are made in this country today, and all from scrap metal.

**MICHAEL:** So wood stoves could be made in California out of materials taken from the waste stream. That would create more employment for people here. If it were to happen in Northern California, it would also reduce the pressure behind resource exploitation that happens when you're in a monocultural situation where the main industry is clear cutting the inherited forest along with degrading streams, salmon runs, and the rest. So recycling and appropriate technology offer a lot of possibilities

for diversification, right?

**DAN:** Sure. Production of fuel is another good example. Now, you have large amounts of wood in the waste stream that are being buried, at the cost of fossil fuel and land, and degraded and made worthless by mixing it up with everything else. By splitting the wood off from the main waste stream and processing it appropriately, you could make fairly large amounts of good, high class, high quality firewood available for people to use. Another part of the same process might make chips for making electricity. Generating electricity with wood is a known technology and it's widely practiced. This kind of incineration is probably a pretty good use for a lot of the wood that we get at the landfill, which is too splintered and too messed up to be salvageable in the ordinary sense.

**MICHAEL:** Dan, with all the recycling that you're talking about there is still the problem of finding places to put materials that we haven't yet learned how to separate. Is there any way to buy time?



**DAN:** An idea I thought about a couple of years ago and spent some time researching is that of mining existing landfills. The point of mining an existing landfill is not so much to recover the materials they contain as it is to reduce the volume of what is there. That way, new fill spaces could be created. This would allow you to actually recycle the landfill itself. It's kind of a novel idea, but I thought it made sense because right now landfills are being exported to new virgin territory, generally uphill and much farther out of town than they were before.

Even if we go full-bore into garbage-burning technology, we're still going to have landfills, but they're going to be new landfills sited on new land in different places than they've ever been before. So, the landfill is still proliferating, and although the number is down, the size is up. While all this is happening, a lot of filled-up landfills repose quietly inside city limits. The material in them is locked away from the air, and so decomposes much more slowly than it would if it were aerated. The method of mining to recover fill space would be something like strip mining. The goal of processing would be to convert slow anaerobic decomposition into a rapid aerobic one. Rapid aerobic composting would release much of the mass of the landfill as carbon dioxide and water vapor. Recovery of metals and rock would further reduce volumes. A contaminated humus material would be created that could be used for fill cover later. Reducing mass is the same as reclaiming space. You might possibly go all the way down to the bottom of the landfill and seal it, something that was rarely done in early landfills. This would interrupt the leachate plume, which in many landfills is currently seeping toxic materials into water tables and aquifers.

By mining a landfill you would essentially be creating new fill areas in existing landfill sites. Maybe this strategy could be combined with expanded recycling to stop at least the proliferation of new landfills, which seem to be hopscotching from the bays and streambeds up to the ridgetops right now.

**MICHAEL:** Do you see any kind of bioregional watershed implications in recycling, or a way it could be organized that way?

**DAN:** Well, consider this: Oakland's new landfill is up near Altamont Pass. Four little canyons that drain into a fifth are being filled with municipal wastes that originated forty-five miles away. If Altamont is the shape of things to come, then we can expect to see new dumps locating up in the headwaters of watersheds. What goes up will come down.

As for the broader organizational questions, I've mostly thought about watershed district planning in relation to liquid wastes, wastes normally carried by sewers. But it's true that in solid waste circles they have a concept that they call the "waste shed" that seems to borrow directly from the concept of watershed. A waste shed implies a boundary containing a flow of solid material—not water—that goes from the periphery to some central point.

**MICHAEL:** What do you think are the implications of recycling for employment? How does recycling measure up against a quick fix solution where disposal equals a burn plant or a landfill?

**DAN:** People have done studies on this and generally their figures turn out to be somewhere on the order of a hundred to one. In other words, there are a hundred times as many jobs in recycling as there are in high-tech solutions like burn plants. A burn plant for the City of Berkeley might employ 25 to 30 people at the maximum, and you can bet they would be trying to reduce the labor cost by cutting people wherever they could. A recycling program capable of handling the same amount of material would necessarily employ hundreds of people directly, and then there would be a lot of indirect employment that would spin off from that. There would be people with partial incomes from it, and people with full-time incomes from it. A lot of complexity, a lot of small-scale production and exchange.

**MICHAEL:** People fixing doors, windows, bicycles, lawnmowers, plumbing?

**DAN:** Right, everything from hanging a door to restoring siding and trim on an old Victorian to spreading organic mulch to control weeds. The employment implications of recycling are immense, and I think the amount of wealth that could be conserved in a recycling society is also immense. We're constantly having to go find and secure new sources of materials now, and that process is expensive, costly, and increasingly dangerous because we have to subjugate other lands and people and worry about whether we have unrestricted access to their backyards.

**MICHAEL:** To their resources.

**DAN:** For all time to come. We've already got the lion's share of many of these resources as it is. They're buried in our dumps. Every day more and more of these resources are going in there. So if we just tapped into this vast flow of material in the right way, with a lot of people being involved in the process, I think we'd be a much richer society.



# RECYCLING AND THE POLITICS OF TRASH

by Mary Lou Van Deventer

When people began getting excited about environmental issues in the early 1970s, recycling was one of the good ideas nearly everyone assumed would succeed quickly. Ten years later, it is one of the last to have a major impact on public policy or the average person's behavior. Instead of handling all of our wastes, recycling centers still work almost exclusively with cans, bottles, and paper—the highest-volume, lowest-value materials in the solid waste stream. The workers either volunteer or are paid starvation wages. They are regarded variously as idealists willing to work for very little in a good cause, or as members of a marginally useful fringe group of the dominant culture. They live from hand to mouth on vanishing small grants given by bureaucrats wearing big smiles.

Recycling is stuck. Political barriers still cause trouble after all these years, leading many recyclers to accept smaller dreams.

But in this decade, the big dream could come true. Landfills across the country are becoming full all at once, and communities are looking for alternative ways to inexpensively dispose of their wastes. Recyclers have been waiting for this opportunity. They will need to clarify their political strategy, though, because the competition is tough and plays rough. There are extremely powerful vested interests, firmly entrenched in the current local, state, and national political structures, that see recycling as deadly competition. They give lots of money to candidates for boards of supervisors, city councils, and state, and national offices. In return, they get the garbage concession.

Garbage disposal is currently a service with no products anyone could sell. Working with garbage is also very declassé. So those companies willing to do it—rumored to be the Mafia in many parts of the country, and taking advantage of high cash flows and few questions—have had pretty much what they wanted. Many cities, according to Joel Witherell, head of recycling in El Cerrito, California, grant garbage-rate increases on demand, without so much as an

audit of the company's books. Auditors get confused at all the interconnections with other companies. The companies don't usually go to the well too often, pay their workers well, and generally keep a low profile except around campaign time.

This snug political situation hasn't opened readily to recyclers' high ideals and big visions of saving planetary resources. People who have for years enjoyed a monopoly on solid wastes are not now anxious to welcome competitors. Sometimes they have used strong-arm tactics. Recyclers from both California and Oregon have told me stories about the time one center's just-finished building was pulled off its foundations and destroyed in the night; another center's separated materials were mixed; participating restaurants in another area experienced mysterious fires.

More often, recyclers are finessed politically. Typically, cities ask for competitive bids for waste disposal. They write their request for proposals with very specific and technical descriptions of the job to be done. The description is usually such that no recycler could win even part of the contract. Often the city doesn't specify any recycling; or includes only token measures that lock the most valuable materials away from recyclers; or it provides the one winning bidder with *all* the funds collected from the public. Consequently recyclers are often lost before they begin. They may be lucky to win the right to use some small corner of the city land at no charge.

Here is the opening for political savvy. Recyclers need to influence the way requests for proposals are written. They need more audacity, too. They are so used to being out in the cold that they will consider outrageously unfavorable long-term situations just on the grounds that they are promised *something*. Instead of objecting strenuously, some recy-

clers settle for what they can gain from ordinances that rigidly divide the flow of wastes between them and garbage companies. Usually the garbage company gets the lion's share; often there is a garbage-burner in the works that results in exclusive "flow-control" ordinances. In Akron, Ohio, a city ordinance now says *all* wastes *must by law* go to the garbage-burner, with none for recycling. Other such ordinances provide for a mere 8% or 10% of the materials to go to recyclers.

Ordinances, contracts, requests for proposal. Politics. I asked Tania Lipschutz, research director for the Sonoma County Community Recycling Center, if she thought being a political activist was necessary. "Absolutely," she said. "With no political activism, we would have been co-opted or forced out."

Mike Anderson, the same center's director, told me, "Living without political activism is possible if you're not getting political pressure in return. In some cities, such as Davis, California, the situation is good." There, the garbage company hired a local recycler to run a city-wide recycling program. The company benefits when the program expands. "But where garbage companies have a vested interest in seeing recycling programs not grow," he said, "recyclers have to build good relationships with politicians. Help them with legislative work. Help push legislation that will reverse the tax system that is skewed toward virgin materials extraction and against secondary materials use."

Because Sonoma County Community Recycling Center was succeeding and therefore taking materials away from garbage companies, the companies began doing some recycling themselves in self-defense. Consequently, the recycling center made its point and still supports itself on recycling and educational programs, and the gar-

bage companies have added a dimension to their businesses.

Another political advantage is having knowledgeable and committed recycling activists inside government, since local governments exercise authority over solid waste disposal. Joel Witherell of El Cerrito came to recycling from parks and recreation; now he is head of the community services section. He managed to establish a very successful city-wide pickup and buyback program for cans, bottles, and newspapers. The center recently went through a tumultuous time because it let its money-making buyback program go to Berkeley to become part of a regional processing area. Now the curbside pickup program is a rate hostage to the garbage company, but because Joel Witherell is able to keep track of the details every day, the prospects look good for its continuation.

Joel advises recycling activists to find out when garbage-collection contracts are up for renewal. That is when progress is most likely, he says, although activists must do their lobbying and persuading months in advance.

In Berkeley, continuing political activism by a group of people working both from within and from without has produced major changes for recycling. About a year and a half ago, a small group of five or six people, of whom I am one, began meeting regularly to figure out how to persuade the city to implement the recycling programs it outlined in its 1976 solid waste management plan. As a group, we lobbied city council members and got one of our members appointed to the Solid Waste Commission. A city council member took on our issue as a pet project. We forced a public hearing. Afterwards, the council agreed to set a formal goal of 50% recycling, to establish a second community-scale composting project (the first died

from bad management), and to add a large salvage yard at the front end of the garbage-transfer station now being built. We put on the ballot a Five-Year Moratorium on Garbage-Burning Plants which won in November. To make this progress, the group met often, worked between meetings on delegated tasks, and stayed vigilant.

I have found the work tedious but rewarding. I took a turn as Solid Waste Commissioner and went to at least one meeting a week, sometimes two or three, in addition to the meeting of the citizen's group. I spent hours on the phone. Still, after a year and a half of it, I'm pleased to have been part of a very talented group that got dramatic results by dint of hard work, persistence, and a refusal to compromise our dream. The program we worked for is underway.

Other people can accomplish as much if they are willing to sniff out pressure points in the solid waste machinery in their areas, then apply relentless pressure. Some tasks to try are to convince city staff that recycling is the most economical disposal option; to split waste disposal into different functions, such as composting, salvaging, and household recycling; to arrange that all functions be funded with public tipping revenues; to rewrite requests for proposals to be favorable to recycling; to convince the city a thorough composition study is necessary before any intelligent decision can be made. In short, to establish audacious requirements for recycling and press for them.

Recyclers don't have to be stuck with only cans, bottles, and newspapers. Urban Ore in Berkeley, a profitable corporation, started by Dan Knapp, Steve Drobinsky, and Bob Beatty, shows that recyclers can make good money and handle big volumes of urban wastes. If Urban Ore can do it, so can other recyclers.

First, though, they need big dreams and the willingness to overcome political obstacles.

Mary Lou Van Deventer is an environmental writer and former Solid Waste Commission member from Berkeley.

## LETTER FROM SWEDEN

I was helping Reidar Ekner bring glass and flattened cardboard to a Knivsta recycling center—a borrowed barn on the edge of town. Once every two months the steel containers are dropped off there by truck, and the town and country people fill them up—Volvos pulling trailers, or paper piled up in the barn. Reidar helped start this two years ago. It's one of the best such local projects in Sweden. It sells the glass and paper, and makes about \$3000 a year, which goes to sports clubs, sports programs, & camping trips, for the children of the area.

Reidar lives about two miles up a dirt road in a house he built himself 15 years ago. It has a little furnace in the basement that burns wood, cardboard, bark—and it heats the water for the house as well. It can burn oil too, but he rarely does that. Reidar runs marathon (he competed in the Boston Marathon last spring) and he has heat from within. We eat a rich split pea soup with rye-



krisp and goat cheese after the morning's work. Reidar's area, Knivsta, is about 25 miles north of Stockholm, "Stockade Island," by fast freeway through woods and fields.

I came up from Lund, in southern Sweden—a reading there with Niklas Tornlund's group "Tundra." Excellent guitars. Reading poems in English no problem—almost total bilingualism. At lunch at an apartment in Lund we had all-organic vegetable sauce on rice: I asked where the rice came from? It was Chicanos.

A reading in Stockholm, and after, a long conversation with a tall blonde woman with fur stole and very short skirt, green tights, she is a dancer. Seven years in Sweden now away from Russia. "Dance-spine-zen!" she says. "Must have good spine."

Away from Stockholm here at Reidar's we've been out looking at Rune-stones by the side of dirt country roads. Serpentine knots with dragon or sea-snake heads that say "This was dedicated by his wife for her husband, who died in the east"—meaning headwaters of rivers leading toward Byzantium, in what is now Russia.

Looking for one tall Rune in the woods we stopped at a barn. An "elk" hung on gambrels, being skinned. What we call a "moose"—the smaller than the Turtle Island version. Hunting season right now, the farmers said, and 4000 moose will be permitted taken in the larger Upsala area alone. Much woods here, as well as farms.

An issue, Reidar says as we push through brush by a reedy wetlands—the transmission lines that will be built across this bird-marsh from the nuclear power plant on the Baltic. Environmentalists oppose it. There is a full-scale "Environmental Party" in Sweden. It claims it stands outside the spectrum of right or left.

Such people are in small numbers also beginning to reinhabit tracts farther north and west where land is still cheap. Not easy, it seems, because the government prefers to see country

land bought by well-capitalized larger farmers, or lumber companies. One is compelled to develop forest management plans for wooded tracts—no saving up your own trees for a vision of a little climax forest. Much of the northern land is public land run fairly commercially—and lots of conflict with the *Same*, the Lapps, who may have been there from before and *through* the latest ice age.

Reidar says part of his push for recycling (the huge electrical generating plant for the city of Upsala runs almost entirely on recycled waste) is that it leads to sparing the forests up north, and the way of life of the Lapps. Many small farmers everywhere, cows, red barns, little fields—the skills are not yet lost.

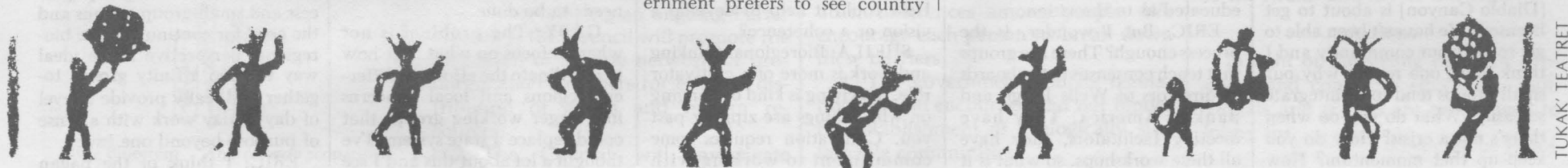
But Sweden, with 8,000,000 people, stands strong and independent in Europe because of its industrial and technological skills, no doubt. Good steel, ball bearings, its own military jets—huge Volvo trucks and tractors. Population less than Mexico City. Reidar Ekner plays a strong part in the inside Swedish dialog between future technology and future biology—his own many books of poems and translations—editions of the great Swedish poet (a secret Buddhist he says)

Gunnar Eckeloff—and a translation called *Sköldpaddan*, "Turtle Island," of a book by me. Also, Melville, Thoreau, and Lu Hsun. But his own work stands without leaning on his translations. We all did a music and reading gathering in Stockholm one night at the Moderna Museum—high tech sound and slides; voice poetry as it always was. Thomas Mera Gartz did his deep Tibetan-sutra voice singing to his own guitar, and his partner Channa Bankier, a painter, was mistress of ceremonies. "Plants," I say to a newspaperman, "are the most developed and efficient possibility of solar energy." After H.T. Odum. And back home in Knivsta we recover from our public work with *Snaps*—clear alcohol, flavored with Reidar's own *artemisia* infusion gathered on Gotland, and rye crackers and pickled herring, after midnight.

One of Reidar's most recent is this answer to a new-age architect—on the Stone Age, "The Unbroken Chain." His own translation.

—Gary Snyder  
Sverige  
October 40082

See Ekner's poem on the back cover.



TUKAK' TEATRET

© 1982 Gary Snyder



# NO NUKES GET BIO ROOTS

Earlier this year pollster Louis Harris invited antinuclear, disarmament, and public interest groups to a Washington, DC, meeting to reveal the growth of nuclear freeze and antinuclear power sentiments among the American public. Because of the steadily increasing popularity of these positions Harris urged their proponents to adopt a more mainstream and less protest-oriented stance, and to separate nuclear arms control and antinuclear power causes because, in his opinion, Americans prefer to take on issues singly and distrust combining them into an overall viewpoint.

Contrary to Harris' appraisal of how Americans think, however, one of the first local Harrisburg, Pennsylvania, residents to testify at last November's public Nuclear Regulatory Commission hearing on the future operation of the Three Mile Island plant concluded by not only opposing nuclear weapons along with the plant's continuation but also stated her dedication to "defending the life of the Susquehanna River valley."

It's plainly obvious that bioregions can never be restored and reinhabited if nuclear power plants aren't resisted and removed, but it is as obvious that the bioregionalist vision offers a positive direction for "No Nukes"? More people are thinking so. A group of those who have contributed their efforts to both "Yes Bioregion" and "No Nukes" recently discussed how both movements lead naturally toward each other. We print here excerpts of the discussion among Planet Drum's networker Sheila Rose Purcell, Abalone Alliance nonviolence preparer Eric Bear, prima facilitator and Center for Urban Environment co-founder Liz Walker, Mark Hage of long-time antidraft and antinuclear activism, and Gaby Welford, cooperatives and worker self-management exemplar.

—Peter Berg

ERIC: Where is the antinuclear movement right now? What are some of its strengths, what are some of its weaknesses?

LIZ: After many years focused on energy issues, the antinuclear movement is gung-ho working against nuclear weapons, a much bigger chunk of the problem.

MARK: There's been a tendency in the antinuclear movement—I don't want to say "elitist"—but it has been a real small movement and now it's becoming grassroots. Whether that movement has a vision and also the courage to look at some of the root causes that led us down this path to begin with is a question that's in a lot of people's minds.

LIZ: One of the strengths of the antinuclear movement has been in practicing small-group process and using affinity groups as a model. I think that's a real basis for any movement of the future. The feminist movement really helped to start that focus on small groups and feminist process, but the antinuclear movement has carried that further by having the small affinity groups become action oriented. I think one of the weaknesses is in bringing these small groups together to really make a mass movement, to make decisions.

MARK: It's very difficult to handle a large influx of people, especially when we're talking about the consensus model. I think one place we have failed is in people not being willing or not knowing how to share the knowledge or the expertise they had. I felt extremely on the edge a long time because I didn't know certain people.

ERIC: Yet, compared to the 60s, nonviolence training has been an important tool for passing on a lot of knowledge and helping to form the small groups. Once the small groups form, though, there has been a problem, "Where to from here?"

LIZ: Nonviolence training has been a definite plus. But all of this is a new form, too. And that makes it harder to incorporate a lot of new people.

ERIC: How is it a new form?

LIZ: Well, I guess the action orientation of the small-group process, and also the emphasis on civil disobedience as a real mass-based movement.

MARK: Fifteen hundred people getting arrested at one time. You see, we've been crisis oriented a lot, at least during my tenure with the Abalone Alliance. Most of my involvement comes at a time when the plant [Diablo Canyon] is about to get licensed. We haven't been able to get roots in our community and I think that's one reason why our small groups tend to disintegrate so easily. What do you do when there's not a crisis? How do you keep up that momentum? How

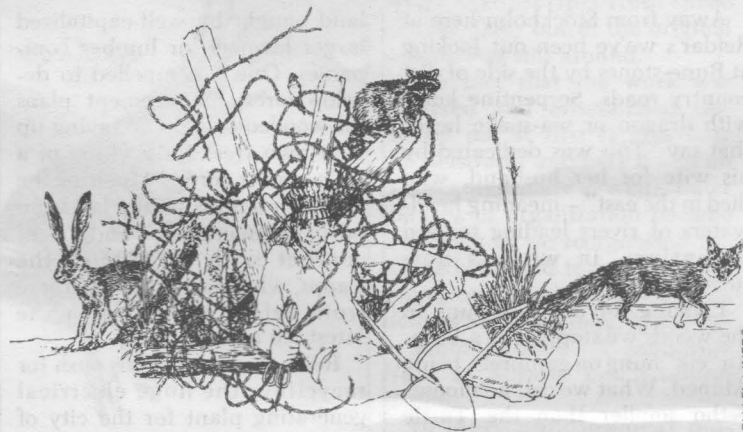
do you keep the community involved? And you can't keep the community involved unless you're part of that community.

ERIC: Do you feel that nonviolence has served as a vision for the antinuclear movement?

MARK: I think nonviolence has been not so much a vision as a strategy. It has helped our credibility. And I think it also has inspired a lot of people. The thing I noticed most after the Diablo Blockade was the number of people who wanted to hear about how we did it, how we kept it nonviolent. It seemed to move people's spirits and to give them the sense that maybe things could change nonviolently.

LIZ: If there's any vision in the antinuclear movement, I think it has more to do with processes of making decisions and working on a small-group level than it does so far with what kind of world we want to live in. People talk about a world without bombs, a world without nuclear power plants, windmills on every house, but that may be as far as it gets. When it comes to the actual practice, then we're a little bit more sophisticated.

SHEILA: When I first got in-



MICHAEL MYERS

involved in Abalone, my father was very supportive of the fact that I was going to be involved in nonviolent civil disobedience action but not so supportive of the fact that I was opposing a nuclear power plant. That surprised me at the time and it was an immediate lesson. He could separate the two out and see the tactic as almost visionary but not applied in that case. When I think about the antinuclear movement and what it has to offer, there's definite process skills. If we can bring people strongly into the process part, just by the way it's organized, they start thinking about nonhierarchical forms of decision making, decentralized forms of action, and through that become educated as to the vision.

ERIC: But I wonder, is the process enough? There are groups that teach consensus to the boards of directors of Wells Fargo and Bank of America. They have meeting facilitators, they have all these workshops, so what is it

that we really are doing? What does the antinuclear movement have to offer once you get into your small affinity groups using this decentralized approach?

LIZ: One of the things that it does in the antinuclear movement that it doesn't for Wells Fargo Bank, for instance, is to offer people an opportunity to carry out actions that are very subversive. As you were saying before, Mark, affinity groups frequently fall apart between crisis interventions. That's a weakness of the antinuclear movement but the strength is the converse—that we are together for crises and are able to act in a very cohesive way in times of trouble.

ERIC: Resistance

LIZ: Right. And it's the support within the small groups that makes that resistance possible.

MARK: I often feel that the resistance is not on the cutting edge of anything, that our process and our actions take us further away from the world. After the Diablo Blockade, I felt I had been caught up in something, not really knowing where it was going, not really knowing what I accomplished.

ERIC: All the skills that we've developed over the last five years, developed resisting nuclear power, are now becoming part of this new peace movement. Is there a direction or coherence to what's happening?

MARK: We started saying "No nukes is not enough," and started exploring other ways we'd be able to change the world besides just stopping Diablo. But the mass-based freeze movement has gotten where it is by exploiting the issue of survival, and exploiting it in some good ways. Right now it seems the thrust is fear, and I'm not sure where that fear is going to go. It could take the kind of forms that are real radicalizing and transform America,

but I don't know.

LIZ: I think that the key that we need to be looking at is survival and how you define survival, because survival meaning a world without bombs is not enough for me. Survival can also mean survival of ecosystems and some sort of sanity in the way that we approach other beings in the world, whether they're people or animals or plants. That's where bioregionalism could play a key role in providing that sense of vision—what does survival mean, what do we want when we're not being incinerated?

ERIC: Well, that opens up then, what are some of the ideas that bioregionalism could offer to the antinuclear movement? How could it help to develop a vision or a coherence?

SHEILA: Bioregional thinking and work is more of a cultivator role. Surviving is kind of hanging on while things are zipping past you. Cultivation requires some commitment to working with

things to make them grow—positive things that will allow us to survive but will also change the culture. I see the cultivator in a lot fewer people and I see it in people who have taken a survivor mentality to a point of, "O.K., I've been afraid enough and I've felt threatened enough and I know I want to live. Now what do I want to do while I'm living?" That's when it begins happening. And that seems to happen when people feel somewhat secure. That's why small-group process and affinity groups are important. They provide community and support. You can catapult into more of a cultivator or a community mode of, "Well, what's my affinity group going to do together besides mass actions?" That's exciting and more than just surviving.

MARK: Bioregionalism has greatly expanded my definition of community to include much more than just human beings, to include natural things, to include other life forms and beings. It has taught me that if we're going to fight, we need to fight from some place. Just sharing common political values is not enough. Bioregionalism is also helping me to see that community involves certain skills and knowledge, knowing *how* to live in a certain place.

LIZ: Almost everyone I know in the antinuclear movement is very conscious about things like composting and garbage. On a day-to-day basis, in terms of personal habits, there is a kind of bioregional consciousness, but it's on a very gross level. Bioregionalism can be a framework for some of the things that many of us are already aware of in part. That's the *bio* part of bioregionalism. The other part is the regionalism. In the antinuclear movement in California there was a time when, with the Abalone Alliance, everybody was focusing on Diablo Canyon as the place to work against nuclear power. And very early on within the Abalone, a number of people said, "Well, how about working on things in our own region, in our own neighborhood?" And that was rejected. I think that more and more now, even in the Abalone and with the Livermore Action Group, people are focusing on physical sites close to them, whether it's the Humboldt plant or Livermore Labs. I like your use of the word "cultivator" and to me that implies getting away from that crisis mentality and using a tremendous amount of patience to build something new.

MARK: It also takes us away from that romantic notion of a radical political work. You know, it's a lot more romantic to run down to San Luis Obispo and get busted at the main gate of Diablo than it is to fight the extension to U.C. Medical Center in the Sunset District, let's face it. What bioregionalism says is, "Look at what's under your feet. Get your hands dirty. Stop being such a prima donna."

ERIC: Isn't there a danger at that point of everything becoming too diffuse?

LIZ: We don't have to be stuck in either solely microcosm or macrocosm. We need to be able to move between the regional perspective or even a neighborhood perspective and something larger. If we're looking at the nuclear freeze, that's most important on a national level. I don't think we should abandon that just because we're also working on maybe putting together a methane digester for the neighborhood. The problem is knowing when to focus on what and getting enough people involved to share the same sense of what needs to be done.

GABY: The problem is not when to focus on what, but how to coordinate the efforts of different regions and local concerns into larger working groups that could replace a state system. I've thought a lot about this and I see

the beginning of an answer in the Polish workers councils.

MARK: One of the things that has bothered me about the bioregional movement is that it sometimes doesn't make larger connections. Because we're concerned about our water system here in northern California doesn't mean we have to ignore what's going on in South Africa. There is a connection.

SHEILA: The Hall of Shame Tour was bioregional, and it connected me with South Africa, and it connected me with downtown San Francisco. Tour guides led us through San Francisco's Financial District and stopped at major corporations in the nuclear power and weapons industry to deliver exposés of each company's dirty deeds. It was an antinuclear action that familiarized me with the Financial District—a place I have to walk through once a week or so. By concentrating on who's in your downtown or who's in your region, you are connected, whether you want to be or not, with incredible planetary-wide destruction. That is one way to bridge the gap and sort of infiltrate the antinuclear movement with bioregional direct actions.

ERIC: When we talk about nuclear power and weapons, the natural basis of both those systems is uranium. To me the antinuclear movement should, with a bioregional perspective, start to focus on stopping uranium mining and milling. It's a natural connection that for some reason has not been brought up that much. It would also bring into connection the land struggles of native peoples in this and other countries.

MARK: Liz and I did a training at the A.I.M. [American Indian Movement] house in Oakland, ostensibly a nonviolence training. It turned out to be a lot different than that. We talked about our experiences at Diablo and the questions that came back were not so much about Diablo but, "Why aren't you doing more about the Southwest situation and the uranium? Why aren't you concerned about the fuel cycle? About the poisoning of native peoples?" That was their starting point, the land itself: if you're not doing something about that, then you aren't really getting at the heart of the matter. And maybe the system's going to force us to look in our own backyard once in a while by trying to ram atomic waste down our throats. All of a sudden, you're going to be concerned where your water comes from.

LIZ: The way any kind of change in philosophy happens is gradually. It's organic and it takes awhile. This may be what we're seeing now—the seeds of what's going to be more popular and more widely understood in a few years. And what you can do with those seeds is spread them all over, make sure to plant them in the right places, like in antinuclear handbooks that go to a lot of people, to begin to talk about this idea in training sessions, start discussion groups, to incorporate it slowly and carefully in a variety of forms of communication that we already use in the antinuclear movement. But frankly I'm not sure how well, for instance, I would be able in a traditional nonviolence training session to talk about bioregionalism, other than a few sentences because I feel very naive about what bioregionalism really means. Those who have been working with the concept for a long time may have similar hesitancy. So, maybe discussion groups in which people really think about it together. Something else occurs to me. We were talking about small-group process and small-group actions and the need for continuity. The bioregional perspective is the ideal way to keep affinity groups together and really provide a level of day-to-day work with a sense of purpose beyond one issue.

ERIC: I think of the pagan

LINEOLEUM PRINT BY MICHAEL MYERS



# GOOD COOKS KNOW WHERE THEY LIVE

## REVIEWS

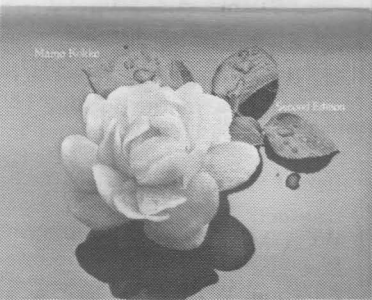
by Robert C. Watts

Of the many creatures, characters, scholars, and enhancers that have wandered through Planet Drum's doors, most have not been truly introduced to its heartbeat until they've observed or participated in its kitchen table theatrics. The conversational pulse of Planet Drum hums as much around discussions about the procurement, preparation, and celebrative consumption of our region's natural provision as it does around typewriters, transcripts, opinions, and pranks. Like fine cartography, food and its region-specific presentation rewards one with new insights into the range and spunk of one's regional domain.

**People are realizing that it's only when they bring an identity rooted in specific places that they have anything genuine to share. After all, the whole point of being international and cosmopolitan in perspective is to go somewhere (or receive a visitor) and say, "This is my culture, my place, and I share it with you, and what is your culture about?"**

Michael Helm

These reviews just begin to explore the best offerings of our local food identity. If you'd like to share the food-related identity of your region through cookbooks, recipes, techniques, dining experiences, new food customs, histories, or whatever tales might stimulate our regional appetites, we encourage you to contribute your ideas to Raise the Stakes and nourish the culture.



This is one for the food whittlers—the ones who respect a good knife, a fine edge, and the little surprises a little creativity and skill can pull off.

Mukimono is the Japanese art of carving seasonal vegetables into garnishes—*muki* meaning shaped and *mono* meaning pieces—it translates into "the art of vegetable peeling." The tools are simple and the results are intriguing examples of flowers, animals, fish, and legendary characters. The step-by-step explanations are straightforward and highlighted with simple pencil sketches and color photographs of final displays. There are also supplemental guidelines on selecting seasonal vegetables for freshness, color, and shape.

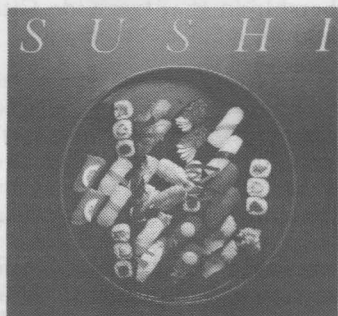
Aside from the technique, Margo Kokko gives a wonderful historical introduction to the "Itamae" who developed mukimono.

*Itamae chefs are known as "the men before the cutting block"—Ita meaning block; mae, before. This title is reserved exclusively for cooks who prepare formal Japanese dinners. To achieve the rank of "Itamae" chef, the individual undergoes forty to fifty years of painstaking training beginning as an apprentice in his youth around eleven or twelve. Through watching and practicing "the men before the cutting block" learn the skills of the knives. The Itamae were not restricted in their search for work. In a culture of one-job-for-life, the Itamae were allowed to seek employment from one restaurant to another throughout Japan to gain experiences in ways of knife handling and different shapes. They were required to know the tastes and serving styles peculiar to each region. Their jobs depended on the knowledge that when serving eel in Osaka, the eel is pinned through the eyes to the chopping block. It must be cut across the belly, not down the back as is custom in Tokyo!*

For those craftspeople who admire a good tool and its consequent advantages, there is an in-depth text on the "hocho" (knife).

*In Japan the knife is looked upon as having a soul. It performs daily for you and must be treated with loving care. . . . A chef guards the tools of his trade and seldom offers his knife to another. He takes his knife with him from job to job. It becomes a part of his appearance—he wears it—and is seldom seen without his knife. His knife is the most important tool of his trade. Among all the knives he owns for specialty cuts (boning, fish, fruits, and breads) most chefs will possess one knife that is regarded with particular affection. If you are interested in stories ask a chef about his knife.*

There should be a warning attached to this book. Once you start indulging in mukimono, you start to spend a lot of time over sharpening stones getting that perfect edge, your imagination starts to run wild with every vegetable you pick up, and you become an amateur garnish magician in search of new tricks. Proceed with caution! *The Final Touch—Decorative Garnishes* • Margo Kokko • CBI Publishing Company • 51 Sleeper • Boston • MA • 02210 • \$12.95



Today, when I want to see a small stage production with front row seating and inventive, unpredictable performers, I hunt out sushi bars. At first introduction into sushi bars, the unusual interchanges

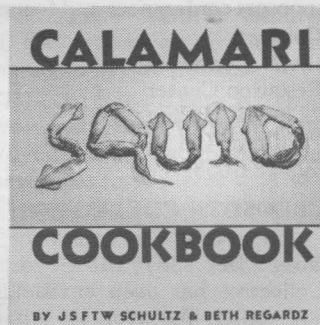
between sushi chef and customer along with the up front display of raw fish and seafood usually scares off the uninitiated. Up until now there has not been a good general sourcebook for sushi debutants, but Mia Detrick's *Sushi* has changed that and hopefully will encourage others to seek out their favorite chefs and bars.

*In Japanese cooking, the virtuosity of the chef is considered secondary to the quality and beauty of the ingredients themselves. It is a cuisine of presentation, not transformation and much Japanese food is served uncooked, or nearly so, in small portions elegantly arranged to enhance its beauty. The epitome of this cuisine is sushi.*

Mia Detrick deftly explains origins, formalities, and individualities of the sushi bar and each chapter is stocked with award-winning photographs of the most common forms of sushi. Most of all, you will become more familiar with the seasonal and geographical fish preferences of Pacific Rim sushi chefs.

For the converted, there is additional information on how to prepare your own rice, nigirizushi, and makizushi and the final chapter offers a quick lesson in Japanese so you'll be able to order your next raw prawn in fluent sushi.

*Sushi* • Mia Detrick • Chronicle Books • San Francisco • CA • \$8.95



**Is it true there's a squid subculture forming on the Pacific Coast?**

**Is samurai squid a California totem?**

**Is there really an international calamari festival sponsored by Friends of the Calamari?**

**How can one easily identify a squidophile?**

**Is the calamari a fashion alternative? Will there soon be designer calamari?**

For the answers to these questions and more only the *Calamari Cookbook* by JSFTW Schultz and Beth Regardz delivers. This crazy duo out of Santa Cruz have not only put together an impressive bunch of squid recipes from around the world, they've managed to write one of the funniest and most informative cookbooks as a tentacle of a vast and growing squid movement.

If you tend to do a lot of your shopping in fish markets you've probably noticed what a cheap protein source calamari can be. JSFTW Schultz of Santa Cruz's India Joze Restaurant has supplied a good introductory read that will get you by all the possible reservations and questions posed by squid cuisine.

*First, let's look at squid before we start cooking it. Raw fresh squid is like a stiff vibrant custard. Fresh squid. When it is frozen, unless it is frozen with a rapidity markedly unlikely, ice crystals form in the juices. As these grow, they pierce*

*the cell walls which were keeping the squid vibrant. This is why the Japanese, who after all should know, insist on fresh fish for sushi.*

*But the issue is more complicated than this. Squid are captured during their mating season, which (as you may know) involves a shallow water orgy ending in egg-laying, then death (by exhaustion) of all parties. Let's face it, any squid caught after four solid days and nights of hard partying is going to be hard put to keep those cell walls up. Some cooks find that beating the meat is necessary to achieve relaxation of the tissue. It all depends when the squid were caught.*

The recipes presented in the *Calamari Cookbook* are undoubtedly some of the newest tastes I've had in years. Where else can you find recipes for "Squid Burgers" and "Coked-out Squid"?

The final chapter invites you to join the growing legions of squid worshippers expanding their "calamari consciousness" with information on how to join the cult Friends of the Calamari.

*The 1st International Calamari Festival combined the efforts of artists, photographers, performers, scientists, musicians, fishermen, poets, printers, and a brave squadron of cooks who, for 10 hours straight, presented a rich variety of calamari dishes to hordes of dedicated squidophiles. Squid Fever prevailed. As a result of the Festival's success, the Friends of the Calamari formed to continue the research, educational documentation and artistic inspiration that was spurred by that historic event.*

Squid Fever?

*Calamari Cookbook* • JSFTW Schultz & Beth Regardz • Orenda/Unity Press • Santa Cruz • CA • 95065 • \$8.95

## TUKAK' TEATRET: THEATRE FROM INSIDE THE HUMAN SPECIES



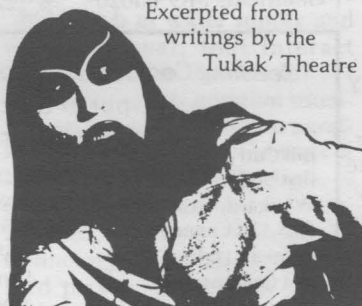
**Formerly the sap was stronger than now, that was in the days when all countries were peopled.**

**Then deeds were performed which nowadays we do not comprehend, and the eyes saw things that are hidden from us.**

**But the tongue brought the experiences of the old through the ages to us, whose sap was thinner. . . .**

Majark, Polareskimo man

Excerpted from writings by the Tukak' Theatre



The Tukak' Theatre is the first professional Greenlandic theatre—and the first Inuit (Eskimo) theatre in the world. The Tukak' Theatre came into existence in 1975 in Denmark and it is based on the west coast of Jutland (Denmark). In this rugged countryside and with the North Sea as their nearest neighbor young Greenlanders have established a cultural center with international importance.

*Tukak'* means harpoon head in Greenlandic. The theatre has chosen this symbol to express their mode of expression and their aims. The harpoon head symbolizes power and strength, a sense of purpose and push. But a Greenlandic harpoon head is worth nothing without a harpoon line, anchored in the point of origin. The harpoon head points forward, while the harpoon line creates the link backwards—toward



the old culture.

The Tukak' Theatre endeavors to trace the modes of expression of the original Inuit society, in order to adapt them to the purposes of contemporary theatre. These words and gestures can be found in the myths and legends (the story-telling), in the drumdance and in games and songs of the Old Greenland. They once were important vehicles for the social expression of the collective human values. They were forced into obscurity by the Danish colonization of Greenland. The modern Greenlandic culture is a product of integration of the original Inuit culture and the Scandinavian/European culture, but still with its own specific characteristics.

Let's take a look at this idea: culture. What does it actually mean? Culture is a way of living. And cultural politics is to find the way in which we want to live. Do we wish the contemporary development? If not, how can we change it? Here we feel we must seek help from the dead, and listen to the wisdom from which our ancestors have received strength. Which qualities made the old Inuits able to survive for thousands of years in a climate which is among the hardest in the world? What gave the Inuits the courage to live through all the hard time and fight for survival? A theatre, a political party, a movement, a school without an explicit active cultural politic is like an airport without a runway.

We are aiming at educating Inuit actors who want to work for the creation of a theatre center in Greenland, and thereby to activate cultural politics. We believe that an Inuit theatre will form a bridge between the old and new culture and that it will become an important part of the entire Greenlandic cultural picture.

Contact: Tukak' Teatret, Dalgard, Fjaltring, 7620 Lemvig, Danmark.



## NUKES

groups that have led rituals right before some of the actions, like the Livermore Blockade, and to me that's one of the ways that these ideas are becoming current—waking up at sunrise and having a sunrise gathering and then the ritual in Marx Meadows for the Hall of Shame Tour—those kinds of celebrations and rituals are the type of cultural ways I think people will start to bring together these connections.

LIZ: That reminds me of Starhawk's new book, *Dreaming the Dark: Magic, Sex and Politics*. She talks about the pagan movement and the antinuclear movement and the interconnections between the two and it's really

exciting. I like that you brought that in about celebration and cultural things. I think we need a lot more of that in the antinuclear movement to make it a really strong, deep movement and not just intellectual or too action oriented without the feelings, without the real celebrating of day-to-day living and the special times.

SHEILA: One thing I wonder is where is the middle ground because on the one hand, people are coming into the peace movement out of fear and survival. The churches and all kinds of professional people are coming in. Those of us who are thinking about visions are also thinking about things like paganism and

rituals. Where's the middle ground for people who are just being introduced?

MARK: I think of people in my own home town that would just freak out at the idea of having a pagan ritual. It's not a question so much of finding a middle ground but just allowing them to stand on the ground they've chosen for themselves.

GABY: Everybody has an interest in food and schools, work and housing, which are real root issues. I think that, especially at the moment when things are a lot more difficult for a lot of people, ideas of buying and raising food together, for instance, and also getting involved more in how the schools are run is really im-

portant for the antinuclear movement.

MARK: Real basic stuff. It's so basic that we overlook it sometimes.

GABY: And that's why we aren't getting the Third World groups in there, because we don't speak to them.

LIZ: That's true in energy too. There's a tremendous outpouring of anger against PG&E [Pacific Gas and Electric] for the rate hikes and if we can approach energy from the standpoint of energy conservation and what people can do to help survive PG&E rate increases, then we're both teaching people how to live here now with the resources we have and also connecting with

energy issues and with the antinuclear movement. I think we need to look for issues that can be seen from both angles.

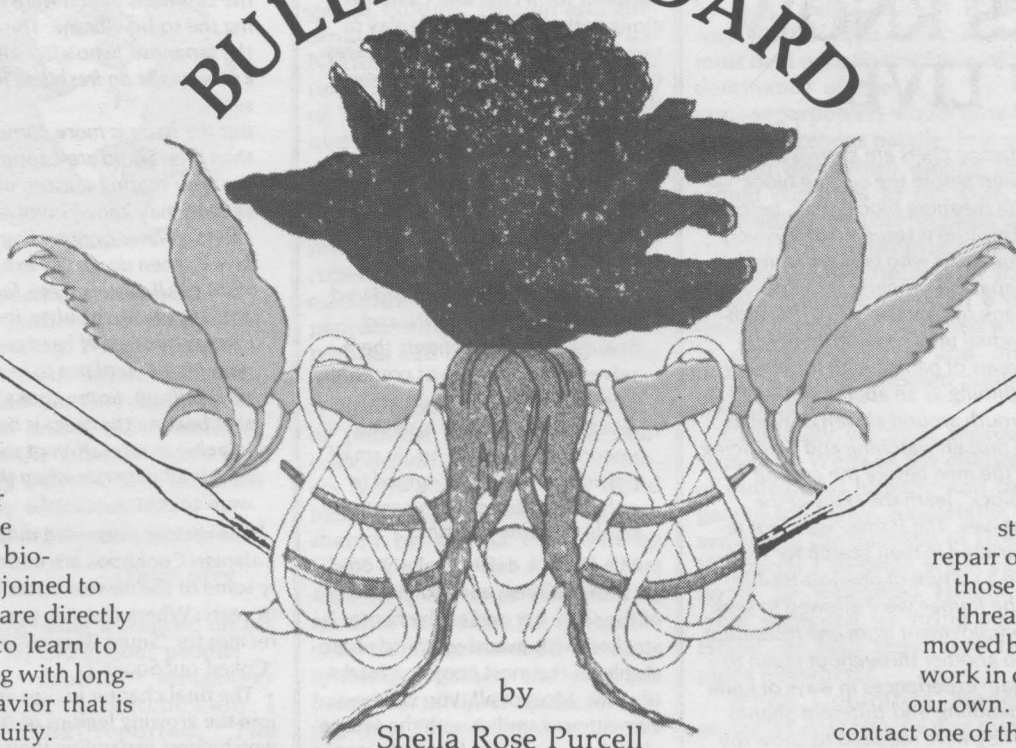
GABY: You were talking about being a cultivator. I was thinking that it is also necessary to be a warrior and we could think of ourselves as warrior/cultivators.

MARK: Whatever vision is going to emerge from all this, it's going to take a lot of different forms. There will be common threats and hopefully a sharing of ways and a sharing of resistance.

LIZ: I think people are open to these ideas. I really think bio-regionalism is where the antinuclear movement will be going. It's a matter of time.



# BULLETIN BOARD



by  
Sheila Rose Purcell

The purpose of this board is to encourage direct networking. Here are people who identify with, and live in, particular places—bioregions. They want contact with other such people and groups. Some are organized around overtly bio-regional concerns, others have joined to address particular issues that are directly related. All share an intent—to learn to evolve habits that are in keeping with long-term sustainability, social behavior that is respectful of biological continuity.

The bio-regional movement has within it a cultural and political diversity that doesn't fit in the traditional left/right categories. It reflects unique life places. It fluctuates and includes those striving to enhance, cultivate, and repair our life support systems as well as those working to resist the continuous threats of destruction. All of us can be moved by familiarity with other people's work in other places that is resonant with our own. If you would like to be involved, contact one of the people or groups in your area.

## DELAWARE VALLEY

Proutist Universal is a worldwide spiritual and social action organization which is starting popularly based regional movements throughout the planet. These movements are organized along bioregional, cultural and economic criteria. All share the common goal of cultural self-determination and maintenance of unique cultural expressions, economic self-reliance, social justice, environmental sustainability, and universal cooperation among all peoples and all regions.

Publications describing Prout philosophy, our vision of regional movements throughout the U.S. and some regional newspapers are available.

**Contact:**  
Bob Kaplan  
Proutist Universal  
228 South 46th Street  
Philadelphia, PA 19139  
215-387-6356

## NORTHCOST AREA WATERSHED COUNCIL

The Second Northcoast Bioregional Conference was held in October on the Van Duzen River in Humboldt County.

Some interrelated concerns unifying the human cultures of the Northcoast bioregion are economic issues revolving around forestry practices, herbicides, fisheries and firewood production. We hope to function as a resource pool among groups working on interconnected issues in the watersheds within the region.

**Contact:**  
NAWC  
P.O. Box 6423  
Eureka, CA 95501  
Marjorie Henry:  
(415) 444-3434  
Larry Goldberg:  
(415) 822-7884

## REINHABITING NEW JERSEY

Our Purposes:

1. To advance a basic understanding and appreciation of the beautiful region of New Jersey.
2. To remedy the pollution of the soil, the water, the air and the coastal regions.
3. To develop a lifestyle based on a sustainable and region-enhancing economy.

**Contact:**  
Reinhabiting New Jersey  
7 Poe Lane  
Allentown, NJ 08501

## PHOENIX/SALT RIVER WATERSHED

We would like to join together to learn about our part of the Southwest—its ecology, geology, and the ways in which people have adapted to living here. The idea is to take this knowledge of regional materials and local conditions, and forge a new framework for living and working here, a sustainable culture in which individuals can feel more deeply connected to natural systems.

Any activity which furthers the cause of individuals and communities in harmony with our environment is relevant.

**Contact:**  
Lisa  
40 East 5th Street  
Tempe, AZ 85281



## OACC

OACC is made up of representatives of organizations, agencies, groups, movements, and philosophies which work for *sustainable systems* in government, agriculture, economics, technology, energy, law, and the maintenance of the natural legal rights, not only of humans, but all living things and environmental entities in the Ozarks.

OACC Representatives also represent the ecologies of the local watershed areas they live in, which naturally subdivide the Ozarks into regions that would correspond to counties if the Ozarks were a state.

**Contact:**  
OACC  
Box 67-2  
Caulfield, MO 65626



## RAIN

The Rain Community Resource Center develops programs, services and publications which help people work together to build self-reliant communities. The Resource Center continues to conduct workshops, develop networks, gives access to more than 100 computerized data bases and coordinates and sponsors conferences and forums.

**Contact:**  
RAIN Community Resource Center  
2270 NW Irving  
Portland, OR 97210  
503-224-6587

## CREOSOTE COLLECTIVE

Since our first meeting in November 1981, the Creosote Collective has been envisioning and acting. We wrote up a pamphlet with our visions of the Sonoran bioregion (and map), have an ongoing bioregional study of the water situation, and have supported local efforts to save desert lands through actions involving the media and various land use politicians around Tucson. The basis for all our work is to begin campaigning for preservation and protection of the Sonoran bioregion in the most effective and creative ways possible.

**Contact:**  
Creosote Collective  
1145 East 6th Street  
Tucson, AZ 85719  
602-623-0913 (Michael)

## GREAT LAKES BIOREGIONAL CONGRESS

The first Great Lakes Bioregional Congress may convene in spring of 1983.

**Contact:**  
Phil Thiel  
Box 62  
Maple City, MI 49664

## THE SOUTHERN NEW ENGLAND SELF-RELIANCE MOVEMENT

Our aims are:

1. Increase the self-reliance of the area in food and energy.
2. Promote the "regionalization" (local control) of the key industries and utilities in the area.
3. Decrease the flow of investment capital from the area, especially that capital placed by residents in banks, insurance companies, and pension funds.
4. Motivate the fine educational institutions in New England to help in planning and research for such increased self-reliance.
5. Promote greater harmony between humans and other life forms in the region.
6. Launch an all-out fight against the commercialization of culture.

**Contact:**  
Paul Bergner  
SNESRM  
56 Norton Street #302  
New Haven, CT 06511  
203-776-7766

## PEND ORIELLE CENTER FOR APPROPRIATE TECHNOLOGY

POCAT would like to expand its present efforts to include helping promote bioregional consciousness.

POCAT, a small group in the northeastern corner of Washington state, is one of 26 such local citizens groups in Washington. Although each is independent, we are affiliated through membership in the statewide Citizens for a Solar Washington.

**Contact:**  
Meg Roellich  
Rt. 2, Box 750  
Newport, WA 99156  
509-447-4264



## EARTH FIRST!

Earth First! will not compromise with the Earth-despoilers! In fact, we want a number of "developed" areas restored to their original, natural condition.

For a sample newsletter or information in California, write Tim Jeffries, 22 Claus Circle, Fairfax, 94930, 415-456-7433.

Other E.F. contacts with a bio-regional interest and willingness to be contacted:

Neil Cobb  
3205 Campus N.E.  
Albuquerque, NM 87106

Neil Schanker  
1221 Thurston  
Manhattan, KS 66502  
913-532-5866

## WYOMING CITIZENS ALLIANCE

WCA was formed last December as an effort to break down the isolation of diverse individuals and groups, to come together to grow in bioregional awareness. We hope to see more real activity in this area in the future.

We are based in Wyoming and consider ourselves part of the Rocky Mountain Bioregion.

**Contact:**  
WCA/Michael Durgain  
Box 238  
Laramie, WY 82070

## MOGOLLON HIGHLANDS WATERSHED ASSOC.

We wish to preserve and enhance the Gila, Mimbres and San Francisco rivers and drainages.

We sponsor monthly programs, free of charge for the general public, some of our members recently participated in the Gila-Mimbres Barter Fair.

**Contact:**  
William Koethke  
Box 661  
Reserve, NM 87830

## TILTH

Tilth is a non-profit association which serves as a link between urban and rural people growing food and promoting regional agriculture. Our focus is on an exchange of ideas and information for new approaches to agriculture for the Pacific Northwest.

**Contact:**  
Tilth  
13217 Mattson Road  
Arlington, WA 98223



*Seedling Contacts* are people who actively correspond with us or people who have asked to be put in touch with others in their region. If there is no one listed in your area and you would like to form a group please let us know.

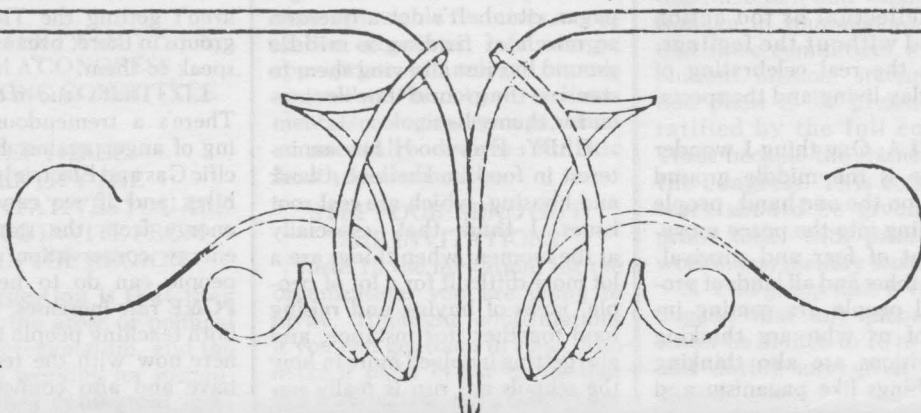
Bill Curry  
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Northeast, PA 16428

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Allison Peck  
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Boulder, CO 80303  
Rob Walkinshaw  
Star Route Box 10754  
Fairbanks, AK 99701  
Emilia Hazelip  
Ferme La Garrigue  
11300 Festes St. Andre  
France

Participate in making this board into an effective tool for all of us to use. Send additions, suggestions and updates. Network with us by letting us know about your work, by sending addresses of those who should see a sample of this issue or future issues, and by telling us how we might be mutually helpful to one another. We may be including allied groups and networks in the next issue.



The next deadline is February 1, 1983. Send a description of what ideas or beliefs hold your group together, what area you identify with and serve, what you hope to do, and who to contact. Shoot for 150 words.



# PLANET DRUM

FOUNDATION

Since 1974 Planet Drum Foundation has served a diverse circle of members and correspondents interested in developing, analyzing and communicating the concept of a bioregion through its regional bundles, books, and tri-annual review, **RAISE THE STAKES**. There are growing numbers of individuals and groups that are exploring cultural, environmental, and economic forms appropriate to the places they live in. Planet Drum Foundation is now developing network and support functions for existing bioregional groups and projects as well as for those that will evolve in the future. We invite you to join the Planet Drum circle in furthering the ongoing exchange of place-related ideas and activities.

## WHAT YOU CAN DO

- 1 Become a member of Planet Drum Foundation. Membership includes three issue of *RAISE THE STAKES*, at least one surprise publication, a 25% discount on all Planet Drum books and bundles, and access to our networking and workshop facilities.
- 2 Help build a bioregional group in your area. We can help by sending you a list of Planet Drum members in your area. You can send us the names and addresses of interested people who will in turn receive a complimentary issue of *RAISE THE STAKES*. Send us ten names and we'll send a copy of *Reinhabiting a Separate Country* for your effort.
- 3 Distribute Planet Drum materials to friends and neighbors.
- 4 Send us a list of your area's cultural and cooperative outlets: bookstores, food co-ops, community and environmental centers.
- 5 Arrange a bioregional workshop in your area. For transportation, room and board, Planet Drum will come to help you.
- 6 Send *RAISE THE STAKES* a report from your region.



## SPECIAL SOLSTICE OFFER

In celebration of Winter Solstice, Planet Drum offers a special package: two books—*Reinhabiting a Separate Country* and *Devolutionary Notes*; a broadside—*So to the "Fourth World;"* and *Raise The Stakes #3*, all for \$11 postpaid. Send this as a gift and we will send a postcard announcing your gift. Introduce your friends to the Planet Drum circle or give yourself a treat. Remember, membership in Planet Drum is always a welcome gift.

## PLANET DRUM PULSE

The fact that cities are parts of bioregions, garbage and all, is the focus of this issue of *Raise The Stakes*, and we're fortunate to have reports from both edges of North America, NYC and LA. As for non-megapolitan areas, the Kansas Area Watershed Council report is the best model for organizing bioregional committees that we've seen so far.

As you may have noticed from the masthead, we've acquired some new roles and faces. Michael Helm now edits only the magazine section—"Harvesting the Trash" in this issue—while the rest of us harvest the other 12 pages. Michael Myers' cover illustration appeared first in *Isthmus* magazine.

Planet Drum on-the-roadies Peter Berg and Judy Goldhaft (and possibly others) will be in Indiana in March 1983 and hope to extend the trip north to Michigan, south to Texas, and as far east as possible to meet with bioregional groups. Let us know if you can arrange a workshop or talk en route from San Francisco or anywhere within range. Help us help your bioregional efforts.

## RAISE THE STAKES

is published tri-annually by Planet Drum Foundation. We encourage readers to share vital information, both urban and rural, about what is going on in their native regions. Send us your bioregional reports, letters, interviews, poems, stories, and art. Inquiries, manuscripts, and tax-deductible contributions should be sent to Planet Drum Foundation, P.O. Box 31251, San Francisco, CA 94131 USA. Telephone (415) 285-6556.

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### Stakes Raisers

*Literacy Engineer*—Ampersand Typography *Faith*—Eric Bear  
*Financial Stress and 1st Telephone*—Peter Berg *Dirt*—Bob Carroll  
*Working Angels*—Mark Crumb and Elsa Skylark *Hired Gun*—Nancy Dunn  
*Boundaries & Buffet*—Judy Goldhaft *Trash Detective*—Michael Helm *Check In*—Marty Lee  
*Underground to Overground*—Diane Nettles *Designated Hitter*—Sheila Rose Purcell  
*Paste & Patch*—Nancy von Stoutenburg *Utility Infield*—Robert C. Watts  
*Underspeak*—Gaby Welford *Ink*—Warren's Waller Press

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- \_\_\_ \$15 regular membership (one year)
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- \_\_\_ \$11 special Solstice package

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

\_\_\_ I am enclosing the names and addresses of friends who would like to receive a sample copy of *RAISE THE STAKES*. I enclose \$1 for each.

\_\_\_ I would like to trade (you name it) \_\_\_\_\_ and/or a report from my region for a year's subscription.



- G** \_\_\_ \$15 regular membership (one year)  
 \_\_\_ \$50 (or more) sustaining membership  
 \_\_\_ \$11 special Solstice package

**I** Send gift to:

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

PLEASE CUT AND MAIL IN TODAY!

## PLANET DRUM BOOKS

• *Reinhabiting a Separate Country: A Bioregional Anthology of Northern California*, edited by Peter Berg. 220 pages. Essays, natural history, biographies, poems and stories revealing Northern California as a distinct area of the planetary biosphere. \$8 postpaid. "The book serves as both pioneer and genre model . . . representing a vital and widespread new ethos."  
 —New Age Magazine

• *Devolutionary Notes* by Michael Zwerin. 64 pages. A first hand account of European separatist movements today. \$3.50 postpaid. ". . . a strange and fascinating little guidebook to a movement that is 're-designing the map of Europe.'"  
 —Rain Magazine

• *Eco-Decentralist Design: A 3-volume set including Figures of Regulation: Guides for Re-Balancing Society with The Biosphere* by Peter Berg; *Toward a Bioregional Model: Clearing Ground for Watershed Planning* by George Tukel; and *Reinhabiting Cities and Towns: Designing for Sustainability* by John Todd with George Tukel. 98 pages complete. Critical preliminary readings for intentional bioregional planning. \$10 postpaid. ". . . Planet Drum is not just attempting to define a type of environmental management; bioregional planning may start from a firm sense of the environment but it also takes into account the present state of, and possible futures for, cities and towns. . . . If we continue to conceptually isolate our forms of inhabitation all the singular wise goals of environmental management, sustainable agriculture and community economic development may be for nought. The Planet Drum package presents us with some beginning working tools to repair the broken fabric."  
 —Rain Magazine

• *Bioregions: Winter 1981/2*, issue #32 of *CoEvolution Quarterly*. Guest edited by Peter Berg and Stephanie Mills. 144 pages. Murray Bookchin on social ecology, Jan Morris, Gary Snyder, and Peter Berg with essays on devolution and the Fourth World. Jerry Mander, Winona La Duke, Wes Jackson and Paul Hawken are among others who contribute to this issue. Reports on the Southwest, Great Plains, North Woods, and Alaska in the U.S.A. \$4 postpaid.

• *Renewable Energy and Bioregions: A New Context for Public Policy* by Peter Berg and George Tukel is SOLD OUT.

about the fragile Rocky Mountains. \$4 postpaid.

• *Watershed Guide & Living Here*. A four-color poster with pamphlet evoking the natural amenities of the San Francisco Bay Area watershed. \$3 postpaid.

• *New Orleans* ("mini-Bundle"). An aural, visual and geophysical view of the delta land, three pieces. \$2.50 postpaid.

• *Turtle Sheets*. An exquisite handprinted turtle shell rubbing with a poem by turtle's son (Peter Blue Cloud). Two sheets sewn together. \$1.50 postpaid.

• *Grounds & Surrounds*. Peter Berg's analytic review of major international and world environmentally concerned agencies. An eight page, 4" x 10" pamphlet. \$1.50 postpaid.

• *Nuclear Order 239*, a reprint. Gil Baille's essay discussing centralized control and nuclear power, with Martin Carey's drawing. Two pages, high quality xerox. \$.50 postpaid.

• *So to the "Fourth World."* A single sheet with Martin Carey's graphic *Vision—Mountain Man II* and Raymond Dasmann's Fourth World Proposal. \$1.50 postpaid.

## RAISE THE STAKES BACK ISSUES

• *Raise The Stakes: The Planet Drum Review, No. 2*. Contains regional reports from Québec, Northwest Nation, The Black Hills, Brittany, Northumbria, Scotland, Samiland, and northern California. Feature articles include: Reconstituting California by Jack Forbes, Eco-Development by Raymond Dasmann, The Suicide & Rebirth of Agriculture by Richard Merrill and the Limits of Population Control by Stephanie Mills. \$2 postpaid.

• *Raise the Stakes: Planet Drum Review, No. 3*. Contains regional updates from the Black Hills and Samiland as well as in-depth reports from Aboriginal Australia, the Rockies, the North Atlantic Rim, and the Klamath/Trinity, Passaic, and Sonoran Watersheds. Other features include Bioregional Comics by Leonard Rifas, Aesthetics by Michael McClure, Renewable Energy To Renew Society by Peter Berg, Cities: Salvaging the Parts by Gary Snyder, Ernest Callenbach, Murray Bookchin and Morris Berman, Decentralism by Jacques Ellul, No Guarantees by Tom Birch, and poetry by Peter Blue Cloud. \$2 postpaid.

• *Raise The Stakes: Planet Drum Review No. 1, 4, and 5* are SOLD OUT.

\*Complete sets of *Raise The Stakes* are still available to libraries and archives.

## BUNDLES

• *Backbone—The Rockies*. A six-part Bundle of essays, poems, journals, calendars and proposals

California Residents please add 6% to the prices for State Sales Tax.





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THE UNBROKEN CHAIN

'Back to Stone Age!?'—from the architect of progress (the one with orange groves at the Arctic Circle, etc.) an irritated outburst . . . Stone Age?

—boats of rush, cedar trunks split by axes and wedges of the Kwakiutl, sailing westward on the Pacific long before the Spaniards Skin the killed deer with a flint or obsidian knife, cut the meat, dry it with smoke from a fire your ancestors have kept alive from before memory An Inuit family on the move with sledges to the North of Jan Mayen, the northern lights flare On the shores far south fires are aflame, tall halfnaked 'savages' dance Magellan adds their land to his name —then they all hunted

Stone Age, he who prophesies wealth, what does he know about the Stone Age? The sun temple of Karnak, the precise calendar of the year, Chichen Itza, the course of the blue stones to the circles of Stonehenge? Stone Age, its cultivated fields, the trade, the settlements, the adaption to the diversified niches of the continents, the necessity of reverence? Because his navel string was cut off he explains that we live in the age of computers Because his mama had a rough time at the washing-board it is immaterial to him that until now existing Stone Age civilizations are wiped out, complete ecosystems destroyed

Stone Age, what does he know about the use of stone, wood, horn and bones, of sinews, the use of the plaited waterbasket? In the Greenland kayak and its equipment more genius inherited and brought together together than in the violent circle of the nuclear accelerator Sustenance, survival of generation after generation, the unbroken chain because his convenience is continuously growing he believes that Stone Age was the cause of his mama's toil Because he puts a sign of equality between necessity and the dogma of a temporary elite of the West he welcomes handcuffs of poisonous metals for all generations to come

ADDRESS CORRECTION REQUESTED

Be attentive, become part of That Other —the knowledge of the shaman in the prepared moment of vision, the needle's eye to the nonhuman In order that not all the people shall be struck by the wrath of the powers above, be crushed the shaman abandons himself and becomes one with the world, flies as a spirit over the waters, seeking its will

The preponderate nuclear physicist, the politician leaning backward in the stuffed armchair of raising standard, what does he know about the flow within the navel string, the truth of the myths, the sagas, the dreams? Stone Age, because they know nothing whatsoever about the Stone Age they set ajar the nuclear door to the real Stone Age the end of life's parenthesis A stone world



# RAISE THE STAKES

The Planet Drum Review

Winter 1983

Number 6 \$2

## HARVESTING THE TRASH



MICHAEL MYERS

L.A.: A FUTURE HISTORY  
KANSAS HEARTLAND NO NUKES GET BIO ROOTS  
1st NATIONS

ISBN 028-7016



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February 1980  
Reidar Ekner

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