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by Darby Anderson, Eldorado, Al Fry, Haelan Hygeia, Jeffrey, Lysander, Pierre, Rayo, WJP, et al. © 1973, Mike Freeman. Special handbook issue, March, 1973. Digitized by Liberty Under Attack Publications. Visit the website, libertyunderattack.com, for more great content like this or to support our efforts.



TRANSCRIBER'S FOREWORD

When Kyle Rearden and I launched *The Vonu Podcast* in January of this year, we took up the tough task of trying to chronicle Rayo's ideas and direct action, as well as trying to re-ignite life back into this very unique strategy, with little to no original source material.

That said, in the past six months or so, I've been scouring the deepest parts of the Interwebs to locate some of it. I have a few feelers out in California and Michigan, but until today, I had yet to hold a physical copy of any libertarian publication from the 1960s and 1970s, other than Rayo's book.

The publication in question is the March 1973 issue of <u>VONULIFE</u> from <u>Earthlight books</u>. It is an 80,000 page booklet, containing a total of 34 articles, about 15 of them being "new" ones from Rayo.

That's right folks, **80,000 words**—that's **twice** as long as **Vonu: The Search for Personal Freedom**. When the economical Rayo put this together, you'll notice that he scrunched four pages onto one and the font is extremely small, so as to save money on postage and ink.

Due to this, I have decided to manually transcribe the entire publication. That should make it easier to read, but I have also included scans of every page for authenticity's sake. It will be transcribed as it is in the publication, with any original errors in grammar or spelling left intact. Any notes/changes/additions made by yours truly will be placed in [brackets]. Also, there are a few instances where the ink is illegible—in those cases, I will place [?] after, denoting that I'm not positive as to the accuracy of the transcription. Any errors beyond that are solely the responsibility of your humble transcriptionist.

A final note: some of the chapters do not contain the names of the authors. I would posit that if, for example, Rayo is attributed as the author for one article and the next is "authorless," it is likely safe to assume that he authored the following one too. Regardless, that is pure speculation, but worth noting.

Just from looking at the table of contents, I can already tell this is going to be a lot of fun. I hope the upcoming articles provide you much inspiration to continue your pursuit of vonu. If you want to see more projects like this come into fruition, please consider supporting our efforts.

Shane Radliff

The Vonu Podcast

November 2017

NOTE TO MAIL-ORDER BUYERS

To save time, this copy was probably sent to you by whoever picked up the mail. Any other business, such as answering questions, forwarding letters or sending VONULINK must wait until your letter reaches the editor, who is usually off in the mountains. So please allow a couple of months.

You may have answered an old ad which said "3 issues for \$1". That was for old newsletter-size issues. This book contains more than three of the old issues. However if you answered such an ad (to a 975XX address) and aren't satisfied, return this postpaid in resaleable condition and I will substitute three small issues.

There are still older listings (for PRE-IN-FORM, which was VONULIFE's predecessor) saying, "4 issues for \$2." If you sent \$2 you will also be sent back issues 7 through 9 if your order comes early in 1973, or the 1974 issue when published if your order comes later.

Sorry for the complications and delays. Lan

ABOUT THE SMALL PRINT

Yes, it's difficult reading. But this way I pack many words and illustrations (more than in two average novels) into this slim book. I save on printing and postage and pass the savings on. (Printed like an ordinary book this would cost \$5 or more.)

Also this conserves paper – and trees. (Funny about those magazines which preach about ecology – and use big type, heavy paper, wide margins and space-filling decorations.)

Also this is a convenience for readers who move around or don't have much storage space.

For easiest reading I suggest: plenty of light; dimestore reading glasses or a big hand lens; reading only one article a day.

WHAT IS VONU? AN INTRODUCTION

"Vonu" means relative physical vulnerability to coercion. "Vonu" (rhymes with so'-new) is a contraction of Voluntary and Not vUlnerable. "Vonu" is somewhat like "freedom" or "security." But those words mean many different things to different people. Rather than argue about what those words ought to mean, I speak of "vonu."

"Coercion" includes murder, mayhem, slavery, robbery, rape, extortion, pollution – any physical interference with peaceful activities of another – whether by individuals or organizations.

Coercion – especially institutionalized forms such as war, regimentations and taxes – is one of the major problems of mankind. Practically all past attempts at solution have been top-down efforts to change "society as a whole." Since the days of Babylon there have been countless attempts to reform governments, take over governments, destroy governments, and manipulate public opinion. At most such efforts bring temporary relief. Usually they have little effect. Often they make matters worse.

VONULIFE represents a different approach to the problem. VONULIFE does not waste space scolding government officials or proclaiming how society ought to be. VONULIFE speaks to you as an individual or small group and suggests ways YOU can avoid exploiting and being exploited. As you reduce the vulnerability, not only do you help yourself; indirectly you also help others by decreasing support of criminal institutions. Vonu is not necessarily only a few; vonu will expand as there are more people willing to do.

A vonuan is a person who has achieved relative invulnerability to coercion. There are many kinds. Some live in wilderness where outsiders rarely go. Others live under the earth. Others move from place to place – living in vans, campers, buses, boats or tents. Some have been vonu for ages – people such as gypsies, mountainmen, hobos, Seminoles. Others are recent refugees from the dying cities. This issue describes some of the equipment and techniques used.

It is not a complete guide. Some topics are covered little or not at all. In future issues I hope you will add your knowledge to what is in here. The people who have written VONULIFE are people who live it. As I write this I am on a secluded mountainside, amongst trees and bushes. The sky is mostly blue and the sun is shining, after a day of rain.

Thanks to Rayo, Haelan, Al Fry, Darby Anderson, Lysander, Eldorado, WJP, John and others for helping research, write, edit and type this. Put together by Lan – March, 1973.

ECOLOGY → VONU: To be relatively safe from coercion I must live in harmony with nature. I must disturb the environment less than does a deer or bear or porcupine – else I will draw the attention of two-legged beasts.

Our shelters are small and low. They blend in with the trees, bushes and rocks. I cut few trees and those I cut are dead, or crowded and dying. I use fire sparingly – only for cooking and crafts, not heating. I kill only to eat or in self defense, and usually eat what I kill. Around camp I often wear moccasins and mukluks, or walk on rocks to minimize erosion and tracks. Any gardening is in small patches and grow-holes, scattered in natural openings.

TECHNOLOGY → VONU: In some ways vonuans – wilderness vonuans at least – are like the people who lived on this continent 400 years ago. But I am not hostile to technology. On the contrary, advanced technology makes vonu attractive. Limited to the materials and methods of 400 years ago, most of my energies would be spent securing food and protecting myself from the elements. I would have neither time nor tools to protect myself from organized predators. I would be less successful than were American Indians, who had generations of experience and faced more crudely equipped aggressors. This doesn't mean I shun "primitive" methods either. I happily blend techniques of all ages to live most freely and effectively. Usually I use native materials for basic structures and large furnishings; manufactured items for light and mobile accessories.

TECHNOLOGY — ECOLOGY: Technology of the early industrial era was cumbersome. Manufacturing was most efficiently performed by throngs of people and big machines crowded together in huge factories. Products were big, consuming large amounts of raw materials. Big railroads and trucks were needed to haul ores to smelters and products to consumers. Mountains of wastes and lakes of pollutants were generated. Early-industrial technology was not very compatible with vonu nor with a clean environment.

But bigness usually indicates crudeness. Trends are now the other way. The newer, more sophisticated products are smaller. Compare a transistor radio with an old vacuum-tube set; a cassette recorder with a player piano; a box of microfiche cards with a library of books; freeze-dried foods with canned foods; a desktop computer with an office full of clerks. As products grow smaller and more efficient, less raw materials, space, power and transport are needed. And less waste is generated.

Better communication replaces physical concentration. Factories, offices and stores are beginning to decentralize with electronic links replacing the routine face-to-face contacts.

VONU → PEACE: Advanced technology makes vonu attractive; contemporary weaponry and coercive institutions make vonu imperative. In earlier times government provided order if not freedom and defense if not peace. But now, when nuclear and bacteriological weapons can be rocketed or smuggled to any city on earth, governments are as obsolete as moats and parapets. The contemporary State is not only incapable of protecting "its citizens" from outside aggressors; it has become the biggest aggressor with its endless taxes, conscriptions and interferences. The State provides "justice" by mass terror, "freedom" by mass servitude, and "defense" by mass murder.

Just as the State is obsolete as a means of defense against foreign governments and private criminals, so politics are obsolete as a means of defense against the State. Political "reform," "revolutions" or "education" at most changes rulers and slogans; it does not bring about enduring freedom. In a community of a few hundred, democratic procedures can be helpful; in a nation of millions they are only placebos.

Defense, like industry, commerce and agriculture, must be decentralized. Individuals and small groups must provide their own. It is too early to say which forms of vonu will prove most effective – how many will live in wilderness, or underground, or on the move, or in ways I can't even imagine. But I think the emphasis will be on concealment/deception/mobility, not intimidation. I believe I can be relatively safe and free only by being invisible or inconspicuous, not by pointing missiles at everyone else on earth.

VONU \rightarrow ECOLOGY: Pollution and exhaustion of resources is caused not by too many people, so much as by too many people all forced to live the same way. The earth supports a vast quantity of life so long as that life is diverse – live in different habitats, eat different foods, defends itself in different ways. Organisms tend to diversify because there are advantages to diversity – that is why there are so many different forms of life on earth. Similarly humans diversify when able to exercise their preferences – consider the variety of peoples in North America 500 years ago – all descended from just a few bands of immigrants.

The relative sameness of humans today is due in large part to coercive institutions of the recent past. Just as a one-crop farmer depends on uniformity of plans, so an authoritarian system depends on uniformity of people. A State can control only to the extent that people act and react in similar ways. It is no accident that the strongest motive for compulsory tax-supported school in the U.S. a century ago when they were imposed, was not better education (literacy was already substantial and fast rising) but destruction of minority cultures through forced association and indoctrination of children.

So big, coercive government, like one-crop farming, is inherently bad ecology. Free "non-conforming" people, like diverse natural vegetation, are part of the earth.

16 "WAYS TO LIVE FREER" A CRITICAL EVALUATION By: Rayo

Here are brief critiques of various methods for increasing vonu or liberty, including some approaches often touted as liberating which usually aren't. Use these to stimulate your own brainstorming and study.

NOT WORTHWHILE

JOIN A MOVEMENT. There are countless political and propaganda organizations – "left," right," and bottom center – which claim to be promoting peace, freedom, security, conservation, etc., and solicit donations of money and time. There isn't space here to thoroly [thoroughly] analyze movementism, but I will point out the most obvious faults.

A political movement seeks to change "society" as a whole rather than help people as individuals. Consequently incentives are weak, except maybe for a few organizers at the top. One will share in the benefits, if any, whether or not *e* joins. So why join? Relatively few do. Very few remain active for long.

Movements use manipulative or coercive means – they must if they are to "move the masses" who have little incentive. And it is the means employed, not the intention of the rhetoric of the founders, which determine the ends achieved.

Movements lack constructive feedback. When someone tries to repair a truck (for example) *e* learns whether or not *e* did it properly from the truck's performance or customer's satisfaction. But in a "crusade" to improve society there is no way of learning the real effects of one's own efforts – "society" may be getting "better" or "worse" for unrelated reasons. Often there isn't even an adequate way of learning what is an improvement – what helps some may hurt others. A crusader can only try to empose ER ideas of what is better on others. And the longer-range the movement the poorer the feedback. Someone campaigning to repeal a specific law (for example) can at least count votes in a legislature to gauge effectiveness.

Whereas an "educationalist" movement which hopes to "improve" the attitudes of future generations grops blindly.

Movements bring out the worst in people. Eric Hoffer, in his book *THE TRUE BELIEVER*, hypothesized that movements attract incompetent neurotics who are trying to "escape" from their unwanted selves. More important[ly], I think, movements turn competent people into incompetents by encouraging them to neglect their own affairs. To "compensate" for inadequacies they seek power over others.

Not surprisingly, movements have a dismal record. They are begun by well-meaning dedicated people but usually bring regimentation and destruction. Current U.S. problems – war, taxes, pollution, inflation, unemployment, coercive schooling, drug laws – are largely the fruits of "noble crusades" of past generations. For example, "pure food and drug" laws were enacted to protect consumers from unhealthy food and treatments. Their main effect has been to deny people the options of legally obtaining raw milk, raw sugar, fresh (locally butchered) meat, and medicines not approved by the AMA [American Medical Association].

It is the broad, long-range movements which have been the most harmful. Both Bolshevism in Russia and Nazism in Germany begun as social betterment movements. In the U.S., the "liberal" movement, originally for helping the poor, brought withholding taxes, "urban renewal" and the Vietnam War. The "conservative" movement, originally for less government interference, brings no-knock laws, wage and price controls, and S.S. [Social Security] registration of six-year-olds.

To blame such results on bad leaders or imperfections of ideology is to miss seeing the forest for the trees. Politics, whether conducted by outright violence or by symbolic forms of civil war such as elections, lobbying and propaganda, is a contest of coercion and manipulation – the most coercive/manipulative people naturally rise to the top.

As for ideological errors: ALL new creations contain errors. With inventions, works of art and other personal endeavors, there is constructive feedback – flaws are identified and eliminated as development proceeds. With movements, in contrast, errors snowball – authoritarian ideas drive out peaceful ideas – ideology is "reinterpreted" to justify exploitation and regimentation.

Short-range campaigns for repeal of specific laws are less apt to run amok, but even these are doubtful worth. Prohibition of alcohol was repealed only after it became unenforceable. Repeal merely replaced, in part, home-brewing and free enterprise (moonshining) with heavy taxes and regulations. But, assuming that repeal was nevertheless desirable, a crusade is unnecessary. So long as a law is enforceable, repeal is unlikely; when it becomes unenforceable, the bludge themselves will end it – e.g., the draft. The best way to reduce coercion is to develop techniques which render it "unprofitable."

Movementism cashes in on guilt – unearned as well as earned. Anyone who contributes to murder and slavery by paying taxes has reason to feel uneasy. The cure is not writing angry letters or joining a demonstration but discovering ways to avoid or reduce taxes. To the degree that one steps out of the oppressive society, does *er* own things and doesn't harm others, *e* has no grounds for guilt. In view of movementism's records, it is the manipulators who head most political organizations who have the most reason to search their souls.

This is not condemnation of everyone involved with movements. Many show integrity and courage that is commendable. But their energies are misspent. Nor is this a rejection of theory or education. It is a rejection of "theory" which doesn't relate to practice (which is mysticism) and "education" which doesn't teach useful arts (which is preaching).

The question to ask about any endeavor is: Does it fill real needs of flesh-and-blood people as individuals? Or is it aimed at unreal groups — "society," "humanity," "nation," or "race"? Someone who solicits donations to "fight" cancer, "fight" pollution, or "fight" taxes turns me off. Someone able to tell me how I can better prevent cancer, clean up my environment, or reduce my taxes gets my attention.

PROBABALY NOT WORTHWHILE

SEE A THERAPIST. If you are unhappy, you will be told by most psychiatrists, ministers, counselors, and relatives that YOU are at fault, and that it is up to you to change – "adjust" to society.

Instead "adjust" society to you by changing your pattern of interactions with it. Some of your supposed faults may prove to be assets once you are in freer surroundings. Others result from continuous exposure to sick culture and will resolve themselves as you reduce your involvement.

Beware of religions, cults and psychotherapy groups which offer "mental freedom" and claim that it is separable from and more important than "physical freedom." Such "freedom" can be achieved only by numbing oneself – reducing awareness and sensitivity to the outside world – focusing instead on myths, rituals and goals set forth by leaders of the faith.

In a sense almost everyone has a free mind (exceptions being inmates of "mental hospitals" undergoing shock treatments, etc.). It is freedom for my body which I am concerned.

This is not a blanket condemnation of all forms of therapy. Some may be helpful for certain conditions. But therapy is not a substitute for physical security.

PROBABLY NOT WORTHWHILE

BUY A FARM. Commercial agriculture is not a freedom way to earn money. Farmers are harassed by Big Brother as are urban workers. Some have been fined out of business for growing grain on their "own" land to feed their "own" livestock.

Most "back-to-the-land" people don't expect to earn money farming, only raise some of their own food. But even as a place to live, a farm or small-town is rarely desireable. True, one is more likely to survive a nuclear war than in a big city. But day-to-day coercion is great; there isn't the anonymity of the city.

For example, many a city-dweller has allowed *er* children to remain out of coercive schools for months – sometimes for years without being hassled. Whereas in the country word soon reaches the authorities.

One family wrote: "We have owned a beautiful homestead and found that 'five acres and independence' is largely a myth under present-day pressures. Our taxes were increased 140% in one year, and, ironic as it is,

my husband was put in jail that same year because we wanted to educate our children at home."

If, nevertheless, you yearn for a farm, I suggest: (1) Try it for at least a year before buying, by care-taking, share-cropping, renting, or hiring out. (See "Situations and Positions" in THE MOTHER EARTH NEWS.) (2) Locate in an area where there are already many people of your sub-culture – freek if you are a freek, conservative if you are a conservative, etc. A large flow of seasonal transients is helpful for anonymity.

Some areas of the Siskiyou region have quite a few alternate-culture residents the year around plus a large Summer Influx. Soil and climate are poor for most commercial farming but adequate for small-scale gardening.

WORTH CONSIDERATION BY A FEW

LIVE OFF THE LAND. This may sound like the ultimate in vonu. Leave behind all the clutter of "civilization" except maybe a jack-knife and trip lightly thru the woods – dining on berries and nuts.

Half-truth: "Over 90% of wild plants are edible." Elaboration: While relatively few plants are actually poisonous, only a few portions of a few plants are particularly nutritious – some seeds, berries, nuts; a few roots. These mature only at certain times of the year. And they are avidly sought by many little animals, birds and insects. When hiking I nibble almost continuously on various conifer needles, grasses and berries. And I undoubtedly obtain vitamins, minerals and roughage this way. But I always return to camp with a hearty appetite.

Half-truth: "I lived completely off the land for a week during a survival course." Elaboration: Most likely you lived off your fat — the bugs and berries were hor d'euvres. Most people out of the slob society have at least 15 pounds of fat, which will fuel one for two weeks to a month, depending on activity. Haelan has fasted (for therapeutic reasons) for a month — embibing only water. She was active and vigorous for much of that time.

Half-truth: "Some city people have moved to the woods and lived off the land." Elaboration: The ones we know of write mostly about the wild foods they get, but also consume large quantities of wheat, corn, beans, rice, and other staples.

Some Indian tribes lived exclusively by hunting and foraging. They had generations of experience learning not only what was edible, but where to find, when and how to gather, and how to prepare and preserve. Most of their working hours were spent obtaining and preparing foods.

Half-truth: "The only way to be really vonu is to be completely self-sufficient; if you need anything at all from that society you are vulnerable."

Elaboration: The more self-sufficient one is the more vonu one is, OTHER THINGS BEING EQUAL. But other things often are not equal. Vonu is costly; for example, a concerned shelter takes longer to build than does a conventional shack of the same size. If one must spend most time foraging, one won't have time to develop vonu.

In conflicts between American Indians and government soldiers during the 19th century, the Indians were usually more skillful and better armed (due to the army ordinance bureaucracy). The Indians won many battles but lost extended campaigns because they had to take time out to obtain food (or starve); the soldiers had outside sources of supply. Today there are tribes in the Amazon Basin who are completely self-sufficient yet very vulnerable.

Haelan and I have eaten a great variety of wild foods – dozens of different kinds of berries and greens, porcupines, rattlesnakes, squirrels, rats, mice, grasshoppers, and acorns. Yet after three years "in the woods" only 20% of the food we eat is wild, figuring raw weights; only about 5% counting calories.

On the other hand we have devoted relatively little time to foraging – we consider shelter development more important. As we gain experience and have more time we expect to forage more. We have available more processing and storaging techniques than did the Indians (though some of these use materials out of the other society). Eventually we believe we can obtain most food thru foraging plus small-batch horticulture.

A few people already have decades of experience and do much better. A few others are exceptionally talented and learn faster than we [do] or are in unusually lush areas. But to anyone new to wilderness vonu I recommend a big grub stake plus a way to get more supplies.

WORTH CONSIDERATION BY A FEW

GET A HORSE AND WAGON. This conjures up romantic images – perhaps of American settlers moving west – perhaps of gypsy caravans in Europe.

Unlike a motorvehicle, a horse feeds itself, largely maintains itself, and sometimes even produces a replacement. A horse and wagon can travel legally on many rural roads if they stay on the shoulder. Contrary points:

The less time one spends on the road the safer one is. I once towed an unlicensed, oversize trailer a thousand miles with an automobile without being hassled once, by choosing my route carefully and traveling mostly at night. I doubt if anyone has moved a thousand miles with horse (or bicycle) on roads in present day North America without being questioned by the bludg.

One is safest on the road when traveling at the same speed as other traffic.

A motorvehicle needs little care when not in use; an animal is a continuing responsibility.

In forest or brushland, a horse or even a burro is largely limited to prepared trails – it can't get to places a human on foot can.

A horse is easily followed by hoof prints and droppings.

When being worked a horse needs supplemental feed, just like a human does, unless there is exceptionally rich grazing.

A human can pack a larger load, in proportion to body weight, than can a horse.

Horses eat small trees and churn trails into foot-deep mud, and so are usually more objectionable to "land owners" than are jeeps or motorbikes.

Nevertheless, a horse (or mule or burro) may be worth consideration by someone who is already very experienced with horses, and lives either where there is miles of open country (parts of the southwest) or where there are many parallel farm roads (parts of the midwest and south).

WORTH CONSIDERATION BY A FEW

EMMIGRATE. A permanent move to another country may be worthwhile for someone who has a special legal problem in the country where e lives but not elsewhere – e.g., someone coming of draft age in the U.S.

But emigration doesn't offer a high degree of liberty. All major countries have repressive governments – less so than the U.S. in some ways, even worse in others.

Large English-speaking countries include Canada, England, Australia, New Zealand and Rhodesia. The latter three are in the Southern Hemisphere and may receive less fallout in event of nuclear war.

Legal immigration involves much red tape. Some people just enter as visitors, then develop "phony" ID. Regardless of how one enters, having friends in a country who "know the ropes" is recommended.

Some smaller countries offer interesting legal interstices but few job opportunities and little anonymity. English-speaking places include Bahama, Bermuda, British Honduras, Channel Islands, Grand Cayman. Such spots may be useful to one who is internationally mobile (further on).

WORTH CONSIDERATION BY A FEW

TRY TO START A NEW NATION. Probably quite a few will be started during the next 50 years (many have started during the past 30 years). And some of these will have interesting features. But this is not a worthwhile activity for most people.

New countries are most apt to be founded by (1) regional rulers who manage to secede from larger states; (2) large multi-national corporations with millions of dollars of speculative capital (the formal rulers may be local "puppets"). Trying to pool the capital and energies of a large number of

small investors is unwieldy; it gives rise to the same problems which infest movements of all kinds – corruption and power-struggles.

The chances of any particular venture succeeding are small, though the potential payoff if it does is correspondingly large. Success or failure will likely hinge on unpredictable circumstances. Even a project which succeeds commercially may not offer much liberty (Freeport, Bahama, for Example). And how much liberty it offers may, again, depend more on happenstances than the ideology of its founders. A small new nation must be on friendly terms with most other governments if it is to have foreign trade and visitors, which it must have to survive. Principles will be compromised.

There may be opportunities right now for people with such skills as oceanic construction, small-boat operation, dealing with foreign bureaucrats, etc. The livest new-free-country venture at the moment I know of is Minerva which can be reached by writing to International Maritime Legal Research, Station E Box 4022, 1723 Broadway, Toledo, Ohio 43609.

The wisest course for someone who doesn't have any special skills but would like to move to a new, free country IF any materialize, is to keep self and savings internationally mobile (topic further on).

At one time I believed that oceanic free-states on artificial islands were the wave of the future. I now think that the same opportunities can be realized more easily, economically and vonuly if less dramatically on continents. Hiding is easier on or under land than ocean. An artificial island is a conspicuous target, unlike a dispersed group of wildnerness-vonuans who associate mostly thru undetectable radio links.

I expect formal claims to territory will become less and less important as the ability of any organization to control or defend large amounts of territory declines.

WORTH CONSIDERATION

COMPARTMENTALIZE YOUR LIFE. Conform outwardly while doing your own things in private. The best places for this is a large city

where there are millions of people, and people are less observant and curious than in small towns and farming area.

Compartmentalization probably includes rented living quarters separate from mailing address and from legal home (ID) address. An adept may sleep, work, bank and play under different identities.

Many people cannot for long withstand the psycho pressures of such a life - a sense of emersion in an alien culture of hostile values - the need to keep up a false front much of the time. One tends to become what e pretends to be.

One doesn't have a secure place to do or own things. A house or apartment is subject to inspection by landlord or police.

Such a life offers no protection in event of nuclear war. I'm not predicting apocalypse; it MIGHT not happen this year, then again maybe not for 10 or 20 years. But an attack will probably come without warning – the weapons exist. So living in a target area is like playing Russian Roulette once a year.

Cities have smog and noise on one hand, and the availability of a great variety of products and services on the other.

Despite the hazards, living this way for a short time may be advantageous for someone who already knows the city and wishes to accumulate savings.

WORTH CONSIDERATION

LIVE IN A GHETTO. One way to reduce psycho pressures while remaining in the city is to gather together with fellow non-conformists. One loses anonymity with respect to the larger culture as one develops subculture speech, customs, mannerisms and dress. But one becomes a relatively-indistinguishable member of a subculture, requiring an aggressor to attack everyone or no one. "All (Chinese, Niggers, Hippies,...) look alike." This doesn't always stop aggressors – e.g., Jews in Germany and Japanese in U.S. during World War II. But this may be a fairly pleasant way to live between pograms [programs?].

Someone wrote in VONULIFE #9: "I find the radical community to be very congenial. I find most of these folks tolerant, voluntaristic, very antistate, and usually quite reasonable — not the dirty, irrational, hippie stereotype you get from straight newspapers...I work as a coordinator with a food co-op, live in a collective, socialize with radicals, so I live 90% of my time in an anarchist society. I know there is a different fascist version out there somewhere, but I have yet to come in contact with it. Radicals tend to be very cool about aliases.

You can become known in a radical community by any name you choose. You could wind up living in a house where no one knew or cared what your "real" name was. And if you're underground, say because you are dodging the draft, your roommates would probably be willing to cover to keep even your presence in the house largely unknown."

One is still threatened by nuclear attack and other hazards of the city. But for someone who can find a compatible, already-established group without much effort, this life is probably more satisfactory than living alone in a city.

WORTH CONSIDERATION

BUILD A SECRET CELLAR beneath a cabin or garage on "owned" or leased land. Entrance to the basement is from within the covering structure. Traffic appears to be to and from that structure, so trails can be made and vehicles driven to the site without arousing suspicion. Thus conventional building materials and techniques can be used, which makes construction easier than is the case for a completely hidden shelter.

Such a cellar may be used only as a bomb shelter and for keeping a part of one's home or shop out of sight. But with good soundproofing and insulation, self-contained utilities, and careful access, what appears to be only a weekend/vacation cabin could become a full-time home. One person at a time could commute weekly to city work, using a vehicle with few windows, so that apparent travel is consistent with weekend-only use.

Possible drawbacks: Keeping secret during construction is difficult. Draining and dampness may be problems as in all underground structures. It will be complex and costly, especially if equipped for surreptitious full-

time use. It is immobile and may not be saleable for full cost should one move. It necessitates considerable involvement with that society — "owning" land, permit to build the covering structure. The covering structure draws attention to the site, which is thus more apt to be closely scrutinized than an area where no structure is known to exist.

Nevertheless this may be an attractive way for someone with plenty of money who is committed to an otherwise-conventional way of living.

WORTH CONSIDERATION

FIND AN ABANDONED SHACK in the woods. In some areas there are quite a few, though on "public lands" the forest bludg burn them when they find them. Some already have stoves and other furnishings.

Drawbacks: Most such shacks were not built with vonu in mind so they are easy to find. Repairing them may be as much labor as erecting a plastic tent. Insulation may be no greater than that provided by a tent.

WORTH CONSIDERATION

GET A BOAT. "Life in a small boat, with the simplest food and clothes, is indeed free and easy. Go where and when you please. You have a sturdy, simple, not too expensive, not too easily damaged boat you can leave tied places while you make side trips. Anchor among islands and eat fish. Tie up at a big city dock for \$20 or so a month and water, electricity and garbage disposal is free. Stay along a river and grow a garden in the fertile, well-watered riverside floodland and probably no one will bother you if you choose it well. Sail the world and travel. Want to hide? Lower the mast, push into the tules and put some on your deck." (Paul Doerr, PIONEER, page 222.)

A contrary view: "I have investigated the maritime scene and my best advice is to forget it unless you need a tax write-off. A boat is only a symbol of freedom...It was having a boat that taught me to hunger for freedom as a drowning man hungers for air...I'm reluctant to become involved with owning anything that requires The Man's approval (registration and licensing), insurance and endless goods and services." (Dick, PRE-IN-

FORM, 1968-1969 reprints.) Also in this vein, Oct. 72 MOTORBOATING has a long article on small boat regimentation.

My own comparison of boat and van: A boat costs roughly three times as much (counting labor if one builds one's own) as a van/camper/bus in similar condition with smaller capacity. For short visits to cities, a van can be parked anywhere (at least for short times), not just in marinas. Waterways seem to be patrolled as much as are highways and roads, at least in North America. For remote living, there are many more miles of interior land than of seacoast, and much of the coast is steep, rocky and sparsely timbered – not suitable for a boat larger than a kayak. The wind is free but maintenance can be expensive – salt water is very corrosive. While a boat can potentially go anywhere there is water, crossing an ocean in a small boat is a major undertaking, not a routine trip.

There are many different kinds of boats and many different life-styles possible with boats. To someone interested I suggest first trying a way of life with someone else's boat, by being a crew member and sharing costs.

WORTH CONSIDERATION

DIG A HIDDEN CAVE. Unlike a secret cellar, there is no covering structure; the entrance is camouflaged to blend with the terrain. While a very high degree of vonu is hypothetically possible, achieving it is not easy. Problems:

The basic structure must be very strong to withstand soil and water pressures and thus heavy. Since a vehicle cannot be driven to the site (to do so would defeat the purpose) and backpacking materials a long distance is arduous, the structure must be built mostly of native materials. Many heavy timbers are needed and these must be cut with care over a wide area and carried to the site.

Much equipment is needed for habitation: at least artificial lighting and ventilation.

Good drainage is necessary. And during warm weather there will be condensation inside on everything exposed unless there is continuous

artificial heat or some other means of reducing relative humidity of inside air. (Otherwise warm outside air enters, cools, and moisture condenses.)

The easiest way to construct is to dig a hole, assemble the structure in the hole, then fill the dirt back in, contouring with the surrounding terrain and adding covering debris. But while construction is underway the hole is visible to anyone walking by, or flying over if there isn't tree cover.

Alternately, if a tunnel is dug, timbers must be put in as one digs (more difficult and dangerous) and dirt carried away from site for disposal. Rarely is solid rock so close to the surface that timbering isn't necessary; if there is, noisy equipment is needed to cut the rock.

Great care is necessary going to and from the cave, to avoid forming visible trails.

All of these problems are solvable but require time and expertise. Completely-underground construction is a promising field for pioneering by someone who is already vonu and has time to experiment. It's not for someone trying to get out of the city who needs something quick, simple and reliable.

WORTH STRONG CONSIDERATION

BE INTERNATIONALLY MOBILE. Don't settle in any one country. Instead be multi-national. Pick and choose the best features from a number of nations while bypassing their undesireable aspects. Thus one might be a "citizen" of Canada, live most of the time in Bahamas, do writing or designing for a U.S. company, and bank in Switzerland. Many different lifestyles incorporate international mobility.

One might use a boat for shelter and transportation. But most of the pros lease living space, travel on commercial airlines, and rent equipment as they need it. A great variety of products, from electronic test gear to earth-moving machines, can be rented in any large city.

International mobility is an extension of urban compartmentalization. Instead of slipping thru the cracks and crannies of a single city one exploits the interstices of many countries. Someone who does well at this kind of life is probably an "extrovert" who enjoys dealing

with many people and a great variety of people – among other things *e* knows when and how to bribe a local customs inspector or immigration bludg and doesn't mind doing so. Some internationally-mobile people live and travel very economically. But life-styles of this kind are easier for those able to affect the outward appearances of affluence, especially when crossing borders. Visibly "poor" people are unwelcome everywhere in the "welfare" world.

There is no set procedure for developing such a life-style. Avenues to explore: overseas employment with U.S. companies; technical specialties in high demand in various countries; free-lance writing; employment in certain capacities with multi-national corporations; being secretary or assistant to someone already into this kind of life. Two periodicals about international mobility are NOMAD/OTHER SCENES and HARRY SCHULTZ LETTER. (See listing of periodicals).

WORTH STRONG CONSIDERATION

BUY A VAN, camper or bus. This can be a mobile shelter as well as occasional transportation for someone who lives part-time in woods and mountains.

One can choose from a great variety of equipment over a wide price range. For ten grand or so one can buy a new "self-contained" motorhome equipped with most of the conveniences of a deluxe apartment. Or, for a few hundred, one can throw a mattress on the floor of a worn out delivery truck.

A van can't be hidden nearly as well as can a shelter that's backpackable or built from native materials. But, if disturbed, one is usually able to move on.

Also a van depends on fuel and roads for mobility; it is comparatively costly as a means of transportation. A van is most suitable, not for one who travels considerably, but for one able to limit movement to seasonal migration and infrequent trips.

WORTH STRONG CONSIDERATION

RIG A TENT IN THE WOODS. For a very few dollars worth of plastic and rope, and a day's work, one can erect a bright, spacious, airy, rainshelter any place *e* can hike to. A few more dollars will furnish it with a foam pad, used bedding mosquito net, and cooking utensils.

Choose a site away from habitations, roads, trials, lakes and main creeks; put the tent among bushes; keep it low, put a few branches over it; be careful with fire, and it will rarely if ever be found. An extremely remote site isn't necessary or desirable – count on backpacking in 50 pounds of dry foods a month plus other supplies.

A plastic tent is pleasant during Summer if shaded and if openings are covered with netting. In the Siskiyou region, it is tolerable all Winter if one has a warm inner dwelling such as a foam hut. Maybe you don't want to live in a tent or live in seclusion the year around. But perhaps you can do it during Summer – vonu that much of your life.

A plastic tent is merely the simplest and quickest of a whole "family" of shelters which can be built out of a few pieces of native wood, polyethylene film, rope and cord. A next model might be a semi-underground structure such as a Shuswap dwelling.

DEVELOP YOUR OWN WAY. This is actually what each individual or family does. There is no universal formula for vonu; different people have different desires, abilities, problems, and opportunities.

A few years ago I did not even conceive of some of the approaches described here. And, a few years hence, I expect there will be ways I can't dream of now.

Approaches which seem especially promising for the near future: 1) Various kinds of semi-underground dwellings, built mostly of native materials, which are comfortable the year around without artificial heat – inside temperature remaining close to that of the earth – about 55°F. (2) Pre-fab modular structures weighing a few hundred pounds, with space and built-in "conveniences" comparable to a small motor-home, which can be backpacked in pieces to a remote site and easily assembled or disassembled. (3) Smum life-styles involving migration between multiple, relatively specialized, relatively stationary low-cost shelters.

SITUATIONS AND SEARCHES

TO VONULIFE: Most of the area around here (middle Mississippi Valley) is still pretty much covered by hunters. The bludg are ever at hand to check the hunters. I built an old shanty boat (32' X 12') ten years ago that I stay on quite a bit – it seems to draw little more attention (more really) from bludg – has wood stove, comfortable, but must be licensed, easy to watch.

There are miles of bottom and back waters here off the main channels. Yet all are covered by hunters, mushroomers, etc. Also people here are highly suspicious of strangers. I would feel safer in an area where people are a little more used to nuts and strangers, perhaps a bit more tolerant than here.

TO VONLULIE: Enjoyed the copies of VL awaiting when we returned after wandering through New England and Maritime Canada. We have been parked in one spot for the last month and a half. It's an alley way in the city and the bludg do come down the alley occasionally. So far no contact. Not very invulnerable except I'm living with the expectation of moving on any time necessary.

Al Fry asked about bad spots in the east. We never had any trouble (i.e., bludg contact, etc.) but we did find likely spots for one night's stopover difficult to locate in southern Vermont. Finally stopped on road to obvious vacation home and prepared cover story to fit – it wasn't needed. I suspect any area heavily into tourism, etc. might be the same. Never had any trouble using "rest stops" or picnic grounds. Recent motorhome mag mentioned get tough policy in White Mountain forest in New Hampshire for camping in unauthorized locations.

Well anyways it looks like I am definitely getting out of here in 26 weeks. Would like to get up your way but probably won't head west until next fall at the earliest.

After four months in the bus – it ain't bad. That heater I mentioned in the last communication works great. Turn it on in the morning, put water on top. Get back in bed. By the time the water is boiling the bus is warm.

And cheap old kerosene you can buy in any general store here for 25¢ a gallon. Will report when the weather gets colder but so far it's beautiful.

TO VONULIFE: So after the big break-away, and roaming Arizona and New Mexico for some months, I fell into a tipi scene for a while here on the eastern slope of Colorado's front range. Mellow, mellow scene. Heavy, heavy head changes – the previous environment had been college grad student and waiter-bartender in classy restaurant.

One day, while exploring formidable terrain near 10,000 feet, came across an old evergreen and unknown mining works — complete with lumber and timbers and even a serviceable woodburning stove. Well — far out.

Five weeks later I'd completed a 16-foot, 9-sided, yurt-type structure; floor, windows, skylights, insulation. Cut up two cords of wood and moved in in time for the last of the fall colors.

Viscious [vicious] winters in the high country. 10 to 30° below; days upon days of gale-force winds. Four to six feet of snow continually on the ground from Nov. to March. (Man, that tipi would have been just TOO cold.) Did several week-long stretchers where the farthest I'd move was to the outhouse (brrrr) and woodshed. Amazing!

And sweet solitude, silence and situation with mother nature's vibration – looking inward I see a pilgrim – the inner journey – so it goes one step at a time in cosmic rhythm and rhyme.

TO VONULIFE: Last issue I mentioned that I have never been hassled by the bludg. As I write this (mid Sept.) I'm lying in the field behind the house we're living in, sunbathing in the nude, drinking a pint of homebrew beer, listening to the crickets chirp, and watching bees flit around goldenrod blooms. If I stand up I can see the houses of suburbia way over there, but they can't see me down here behind the tall grass. We've lived here for months now; they don't bother us, we don't bother them. It seems I don't have to go off to the wilderness to do my thing, not just yet anyway. I can usually find a comfortable niche near wherever I am.

This morning we walked back behind the house to get some pears. The house we're renting sits on an acre lot, but you can walk maybe three miles back thru overgrown fields and small woods. This is good foraging land, land that's in between no longer being farmed, but not yet cut up for suburban development. The speculators in the city who own this land don't care who wanders on it, as long as it gives them no trouble. So we can go back and gather the harvest; pears, apples, wild grapes, elderberries, choke berries, strawberries, sumac, hawthorne, and more. Picked a couple of bushel of pears this morning which didn't dent the supply. We'll can some and dry some.

My experience with collective living and observation of others around here indicates that this is an ongoing process rather than achieving a fixed status. There is a constant flow of people, houses, changing relationships. If you need something more stable, this is not for you. But any bludg will have a very hard time trying to trace you thru all the changes. Getting the right people requires a continuous selection process. With non compatibles, you ask them to leave, or you leave. When we have an opening in our house, we all talk to the prospect; any present roommate may veto. You have to be ruthless about telling someone they can't move in, if it won't work. A house should stay small enough so everyone knows everyone, then social control will prevent rip off.

40 BY 8 FEET OF SHLETER FOR \$30 AND ONE DAY By: Rayo

Tents I've seen for sale are ill-suited for full-time living in wet, forested areas such as the Pacific Northwest. They are dark and dank inside, and unnecessarily expensive for the space they provide.

Two years ago we were living in a tipi-shaped military surplus tent. After two days of steady rain, condensation or leaks (we weren't sure which) dripped from every irregularity and soaked us and our gear. In disgust we moved out, tied a rope between two trees, threw a piece of plastic over it, and found this was a big improvement. There was still condensation, but it ran down the plastic instead of dripping on us. The plastic passed plenty of light and was inexpensive. Since then we've experimented with several variations, all using polyethylene film ("builder's plastic").

Based on experience so far, here is how I would erect a base-camp shelter for two in a heavily forested spot, where there is little wind or direct sunlight, and where winters are mild enough to live without artificial heat – temperatures seldom below 20°.

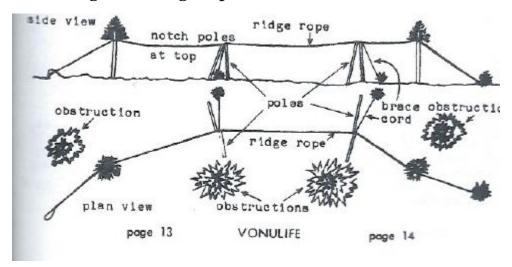
I buy a fifty-foot roll of clear 6-mil polyethylene, 20 feet wide. This costs about \$15 and weighs about 30 pounds. This will make a tent that is 35 to 40 feet long, 8 feet wide at the ground and 6 to 7 feet high in the center. This size is not excessive for a camp which two will occupy for several months; there are not the shelves and cabinets of a cabin or camper – much ground area is used for storage. Polyethylene in wide widths is sold by Sears, Wards and many building-supply stores. I also buy a hundred feet of inexpensive polypropylene rope (at least 1000 pound test) and several hundred feet of lighter cord – cost about \$6. Polypropylene doesn't rot as do natural fibers, and stretches less than nylon.

I probably spend several days scouting a good site. I look for a 10-by-40 foot strip which needs little clearing but is among evergreen trees and high brush for shade and privacy. The strip may bend or zigzag, it need not be straight. If possible I avoid spots which show signs of washing during heavy rains. (See figure 1.)

When clearing I cut as little as possible. Along the edge I tie back branches instead of cutting. I may ditch around the high side for drainage. I check for dead trees or large branches which might blow down in a storm and pull or cut them down.

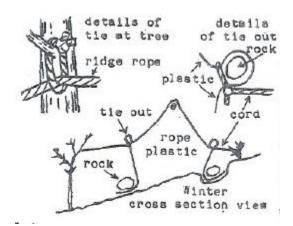
(Transcriber's Note: Figures 1-4 are below.)

I string the rope between two trees at the ends of the strip. If the trees are small I brace to large boulders or the bases of bushes. I do not tie around a small tree; instead I tie the ridge rope up to a branch. (See figure 2.) This is to avoid damaging bark. If there is not a conveniently located tree at one end of the strip, I cut a post from a dead tree and brace it erect. If I am angling the shelter around obstructions (as shown in figure 1), I cut poles and brace them in pairs where the ridge rope changes direction. This also minimizes sag of the ridge rope.

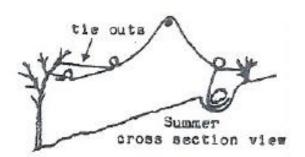


I drape the polyethylene over the ridge rope, between the end trees. During winter I tie both sides outward a couple of feet from the ground, then angle inward at the bottom and anchor with rocks, logs or dirt. (See figure 3.) This shape allows the snow to slide off the tent. (If the tent were delta-shaped, the snow would pile up on the sides and stretch the plastic.) I tie to the plastic every few feet by bunching it over a small pebble ½ inch to ¾ inch diameter; no cutting is necessary.

If I use a ground plastic, I leave a few inches of bare ground between its edges and the sides of the tent, so that condensation does not run onto the ground plastic. For the same reason I do not place objects in contact with the tent. If I do not ditch, in winter I keep possessions which could be damaged by water off the ground – even in a well-drained spot water will run in once the ground outside becomes saturated.



In warm weather I remove the anchor rocks along one side and tie the plastic out for greater ventilation. I leave the other side anchored to block wind. (See figure 4.)



The poly tent provides shelter only from rain, snow, dew and wind. I can keep out insects by adding large pieces of curtain material or netting to the ends and open side. But more likely I only protect the bed area by rigging a mosquito bar over it. (Herters sells one of nylon, $76 \times 36 \times 36$ inches for about \$6.) During fall and winter when days are short and we use artificial light in the evenings, I rig a blackout tarp over the bed – a 12 by 16 foot piece of black polyethylene suffices.

If we cook within the tent, we use a small propane stove. If we cook on a wood stove, we do so away from the tent under a fly (all sides open) of black poly.

This design isn't suitable for a sunny location. Sunlight deteriorates ordinary clear polyethylene in six months (I've read). Other problems: the tent becomes very warm; the plastic casts reflections visible for hundreds of

yards. Monsanto 602 or some other plastic made especially for greenhouse use will withstand sunlight for two years (it is claimed). One source is A.M. Leonard and Sons, Box 316, Piqua, Ohio 45356. 602 costs about twice as much as polyethylene.

Comparing this shape with the covered-wagon-shaped polyethylene dwelling described in The Mother Earth News #16: The covered-wagon-shape provides more standup space for the same amount of plastic, but involves more work, uses more trees, doesn't shed snow, and is likely to have condensation drips.

This tent has proven satisfactory in the Siskiyou from about April through October, tolerable in winter with the addition of a foam hut. And it is bright, roomy, simple and inexpensive.

A HIDDEN HOME: THE SHUSWAP DWELLING By: Jeffrey

Here is a way to build a warm, well camouflaged, almost free dwelling that doesn't take a whole lot of anything but a few tools like an axe and shovel and a little hard work to put it up.

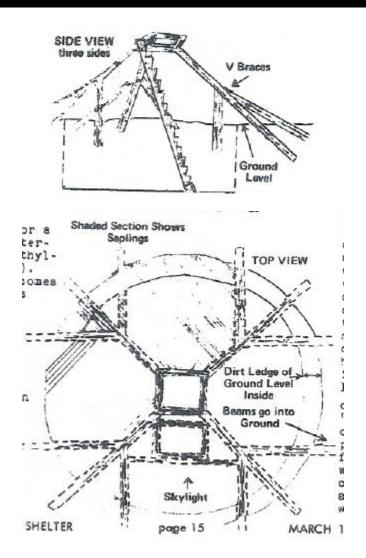
I got the idea from a survival manual written by a very right wing Christian dude named Dallas Roquemore called *GET THREE TO THE HIGH MOUNTAINS* and used a few of my own ideas to make construction easier.

It's called a Shuswap Indian dwelling, and the Shuswaps are a small tribe who live in the Canadian Rockies — the only non-treaty tribe left in Canada. Got a little information from one of them I was in jail with and I guess they're pretty nomadic now too. From all I gather they must have some piss and vinegar behind them.

The dwelling is a small dome dug into the earth with lodgepole pine for beams and saplings over that. Then I use a layer of Visqueen (polyethylene film?) and over that the dirt dug out, or adobe if you have the time for it and the dirt is right for it.

I've built four now, and each one is a little different. The biggest is 18 feet diameter and 8 feet from floor to ceiling in the middle, and the smallest 12 by 6. Skylights are nice if you can get some old window, rawhide and varnish, or even Visqueen will do I guess but it should probably be doubled.

I usually find a small, old barrel at the dump for a stove and flatten the top to put pots on, and run the stove pipe out the entrance hole, which I cover with a small dismountable A-frame, or dome made of willows and canvas. The A-frame is 3-sided, the fourth being a canvas flap.



A piece of drainpipe makes a good ventilation hole.

It's a good idea to ditch the outside perimeter and run the Visqueen all the way down, then fill the ditch with rocks you've dug out of the hole. Usually there is more than enough.

The main beams can be bolted, spiked, pegged or lashed together. I've always nailed the saplings to them. The ladder is simply a log with notches out for steps.

I've had some problems with condensation when I've left for a week or more, but keeping a fire going for cooking, and heating in Winter has kept it pretty dry. This is in semi-arid country though, and I imagine around the coast there would be more of a problem.

The shuswaps I've been building have never had any serious attacks by bears, and they have been built in bear country – both blacks and grizzlies. But then I don't eat meat or keep anything too appetizing for them to smell in the open.

One person can build one for himself if he's into a solo thing, which is handy. I built my first with the help of Claudia and Lynn. After putting some large stones for steps on, it collapsed due to excessive weight and faulty spiking. So we did it all over with two feet of snow on the ground and I spent the Winter in it, warm and comfortable with temperatures as low as 40° below. We had a hot spring nearby and it was truly a blessing for layed-back bathing.

HOW TO BUILD AND DESIGN WITH NATURAL TIMBERS By: Rayo

This article is based on my experiences over a three-year period building one completely underground smial, one semi-underground structure, sever[al?] bed frames, and bracing for plastic tents. My practices are still changing – I have much to learn. However I have seen little in print relevant to this kind of construction so I offer these tentative suggestions.

WHERE TO USE: Vonu construction with natural timbers is slower than dimensioned (commercial) lumber. I use trees only at sites remote from roads. If a 4-wheel vehicle can be driven to a site, I would use one or more vans or campers for shelter. If a 4-wheel vehicle can be driven to within a quarter mile, I would use mostly salvaged lumber or other processed materials. Or I might prefab a structure in small sections away from the site, backpack to the site, and assemble it there. I make these choices not only for economy (money and time) but to minimize activities near a site likely to draw attention to the area.

WHAT TO BUILD: A conventional log cabin requires large quantities of wood. This was seldom a problem for European immigrants a century ago because: homesites were usually on land where trees were plentiful; trees had to be cut anyway to clear land for crops; trees were all cut close to the site and didn't have to be moved far; homesteads were not concealed, nor would concealment have been possible with traditional farming, stock raising, logging or mining.

But even a century ago a log cabin was a "brute force" solution. It not only consumed many trees but provided poor insulation – a fire was needed in Winter for warmth. And if one moved, the cabin had to be left. The Indians – more sophisticated in working with native materials – built structures which used fewer and smaller trees.

For a vonu dwelling a lob cabin is usually unsuitable. The site is often on steep and rocky terrain where trees grow small. Trees must be cut sparingly over a wide area so as to not significantly alter the environment, and so timbers must be backpacked thru brush and over rough ground – a

vehicle trail or even mule trail would defeat the purpose. Use of a power saw or axe is undesirable because of noise. Then too, a vonuan can use materials which did not exist a century ago such as polyethylene and synthetic cord.

In my projects to date, the most time consuming tasks have been timber preparation – including finding removable trees, cutting, trimming, debarking, disposing of unusable parts, and carrying to site. Even when building completely underground, I spent more time preparing timbers than I did digging and filling rocky soil.

So I use natural timbers sparingly, for main beams and posts where there are bending or compressive loads, usually not for bracing, surfacing, or shelving. And I design for use of pieces light enough to carry easily – rarely over 100 pounds.

At present I do not recommend any particular design. What is best will depend on the environment (rain, snow, drainage, temperatures, shade, slope, soil), materials available (trees, brush, rocks, soil, leaves), size (covered space, warmed space, headroom) and degree of vonu desired. And it is to vonuans' advantage to use a variety of shapes and locate in various kinds of terrain, so that hostiles do not know what to look for.

One good source for ideas are the dwellings of "primitive" peoples such as the Shuswap (preceding article). Look thru books on native peoples in a large library. Use such designs for starting points for your own creating. Primitive people did not have, on one hand, strong waterproof plastics available for a penny or two a square foot, nor, on the other hand, airborne snoops to contend with.

Vonu construction seems to have little in common with "conventional" building, so experience in the "building trades" is not especially helpful.

For a first structure I suggest something that is small, mostly above ground, not especially remote (but at least 400 yards from the nearest vehicle trail), and very well hidden. The latter is important since one will want to quickly weed out forms difficult to conceal. A first structure might be a sleeping hut for one person which is also a scale model of a possible larger shelter.

One should build er own shelter and do so out of natural materials only if e is willing and able to experiment – i.e., can survive a failure or two.

PREPARING TIMBERS: For vonu and conservation (which usually go together) I cut only dead or dying trees. If dead I choose trees which have been dead long enough for bark to be easily peeled off, yet with most of the wood sound – not rotted or eaten away by insects. But for the crucial parts – main beams and posts – I prefer trees which still show a few green needles. I look for trees which are being crowded out, such as one or two of the smaller trees within a clump which are overtopped by their neighbors and are green only on the uppermost branches. I prefer conifers – e.g., pines, douglas-fir. I do not take isolated trees regardless of condition.

If I expect to use the shelter more than a few years I remove bark. With live trees this is easiest if the trees are cut in Spring and debarked as soon as they are cut.

I use a bow saw for main cuts and a small crosscut saw for removing branches. I saw each tree off flush with the ground to minimize stump, and cover the stump with rocks or leaves. Any parts I am not able to use I dispose of under thick bushes.

I allow live wood to dry, preferably for several months before using. I stack loosely under a rain/shade shelter – fast drying in the sun may increase splitting.

The wood of a few trees – redwood, giant arborvitae – are naturally resistant to decay. Other woods must be treated with a preservative if they are to last more than a few years, if used underground, in contact with the ground, or frequently damp. I have used preservative paint contain pentachlorophenal (there are many brands – sold in most building-supply stores). The paint dries to a hard finish and is then supposedly non-toxic to touch. Creosote, which is often used for wharves and telephone poles, is cheaper but always sticky and smelly.

FASTENING: Nailing is difficult with natural timbers. A stout nail often splits the wood. A slender nail usually bends. If I use nails I first drill a hole slightly smaller in diameter than the nail. Glueing [gluing] wood to wood doesn't hold well because of absence of flat surfaces. Binding with fiberglass tape and then epoxying might work – I haven't tried it.

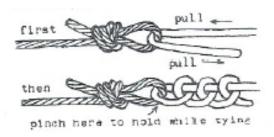
I do most fastening by lashing with cord. I use mostly polypropylene, which stretches less and supposedly weathers less than nylon. I do not use manila or cotton because they quickly rot in a wet climate. I find woven rope easier to work with and usually less expensive than twisted.



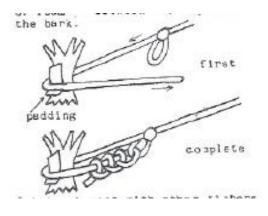
For exceptionally tight bindings I use ½ inch wide rubber strips cut from old innertubes. But rubber is probably not as durable as polypropylene.

Poly cord is slippery; most "boy scout" knots won't hold. If in doubt I add extra loops and tucks.

To tie tightly (for guy ropes and lashings) I first tie a loop in one part. I then feed the other end thru the loop, pull tight, and tie to itself. This pulls tighter than any ordinary knot and will hold in any fiber I've encountered.

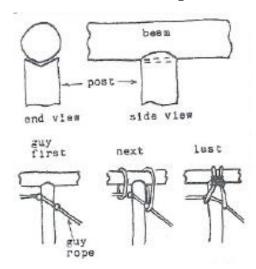


If I must tie to a living tree or bush I do it as shown below. I don't tie completely around a trunk; doing so might cut off sap flow and kill the tree. Unless the bark is very thick I put an inch of padding – rags or foam – between the rope and the bark.



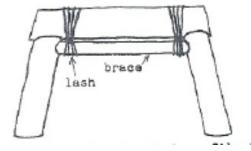
I brace a post with other timbers or with guy ropes, I don't depend on soil around the base to keep it upright. (If I dug a deep enough hole and had a long enough post the soil might be sufficient but guying is usually easier.)

To keep a beam in position on top of a post, I cut the top of the post to a shallow V shape, and lash the beam to the post.

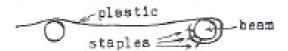


If there aren't guy ropes which keep the lashing from slipping up the post, I take advantage of branch stubs, groove the post with a rasp, or use rubber strips.

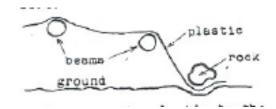
A variation of this can be used in underground construction where the posts bear side pressure as well as the weight of the beam. The ends of the brace as well as the tops of the posts are V-cut.



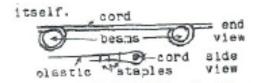
If I fasten the polyethylene film to an end beam or post, I wrap it most of the way around and staple – stapling three rows, each at one inch intervals, staggered. I have used an ordinary paper stapler and chisel-point staples on conifer wood with satisfactory results.



Alternately, I may use the same plastic as a side wall in which case I anchor with rocks or dirt.



If I fasten the plastic to the ends of beams, I first tie a cord between the ends, then fold the edge of the plastic over the cord and staple to itself.



CALCULATING LOADING: <u>Caution</u> – To keep the math fairly easy I have made many simplifying assumptions. Also the strength of materials can vary greatly from values I have used here. If failure of a structure could be dangerous or very costly, I recommend having a design checked by someone who is experienced at building with natural timbers.

Weight of some covering materials in pounds per ft³ (cubic foot):

- Bracken fern, dry, dead, not packed − 5
- Leaves or pine needles, wet, packed 24
- Gravelly soil, wet, packed (some are heavier) 100
- Snow, new fallen (weight will vary) 7
- Water 63

To get the weight of one ft³ of any material I weigh a measuring cup full on a postal scale, subtract the weight of the cup, then multiply by 120. Weight of 6-mil polyethylene film, the most used surfacing material, is 0.03 pounds per ft² (square ft.).

To predict the pressure on a surface, I calculate the weight of each material which is supported by each square foot of the surface, then add together.

Example 1: A roof must support 2 inches of wet leaves, average after settling, plus 4 feet maximum of fresh snow. 2 inches equals 2/12 feet, so weight of leaves on each square foot of surface is: $24 \times 2/12 = 4$.

Weight of snow is: $7 \times 4 = 28 \text{ pounds/ft}^2$

Wind pressure on a surface depends on the shape of the object and direction of the wind as well as wind velocity, but is rarely more than:

$$P_w = V \times V \times 0.003 \text{ pounds/ft}^2$$

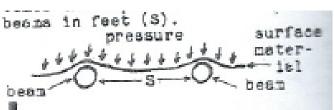
Where V is wind velocity in miles per hour and P_w is wind pressure on a square foot of surface.

Effect of wind is often to lift a roof, so wind pressure may be opposite to pressure due to covering materials and should be considered separately rather than adding it in.

Example 1, Continued: The structure is low and in a sheltered area. Wind guests are never expected to exceed 40mph. Wind pressure on the roof:

 $P_{\rm w}$ =40 x 40 x 0.003 = 4.8 pounds per square foot

STRENGTH OF SURFACING MATERIAL REQUIRED: If the beams which support the surfacing material are uniformly spaced, I calculate the weight of covering (W_c) per foot of length of each beam by multiplying the pressure times the separation of the beams in feet (S).



 $W_c = P_c \times S \text{ pounds/foot}$

If I use 6-mil black polyethylene film for surfacing, and it is rarely exposed to sunlight, I calculate the number of layers (N) required to safely support the weight by: $N = W_c/36$.

I always round upward to the nearest whole number. For calculating other surfacing materials see Appendix 2.

I use these same formulas to calculate material needed to withstand wind. But S is now the distance between anchor areas of the polyethylene. (The plastic may only rest on most of the beams rather than being fastened to them.)

The larger value of N will be the number of layers I use.

Example 1, Continued: Pressure due to cover is 32 pounds/ft2 (calculated above). The beams will be two feet apart.

$$W_c = 32 \times 2 = 64 \text{ pounds/ft}$$

$$N = 64/36 = 2$$
 layers

Pressure due to wind is 4.8 pounds/ft² (above). The plastic is anchored to cords tied between the ends of the beams which are ten feet long.

$$N_p$$
 [?] = 4.8 x 10 = 48 pounds/ft

$$N = 48/36 = 2$$
 layers

So two layers of 6-mil poly should be sufficient.

Polyethylene is usually strong estimated lengthwise – as it comes off the roll. Crosswise strength may be reduced by folds or seams. So I orient it with its length across the supporting timbers. There are much stronger plastics available such as nylon reinforced vinyl, but they are heavier and must costlier.

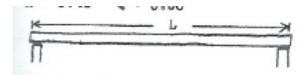
BEAMS SUPPORTING SURFACING: If the beam is round (natural timber) I calculate the diameter (Db required by using both the following formulas and taking the larger answer:

 D_b is diameter of sound wood only, not including bark and any rot. W is weight per foot of length of beam (calculated before).

B and H are strength of wood to bending and horizontal sheer respectively, including safety factors. Most conifers have values of B and H greater than 500 and 20, respectively. Some broad-leaf trees (willow?) are weaker (Appendix 3). L is length of the beam in feet.

C and K depend on the manner in which a beam is supported. Values for some common configurations are in the figures below. Loading is assumed to be the same at all points on a beam except for configurations 6 and 7. (Q is used further on).

Configuration 1 – Beam supported on both ends... C = 15.3, K = 0.43, Q = 0.50.



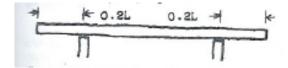
Configuration 2 – Beam supported in the middle, braced with ropes on both ends, force on both ropes not greater than 10% of weight on beam. C = 17.0, K = 0.52, Q = 1.10.



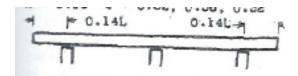
Configuration 3 – Beam supported at one end and at a point three-tenths of length from other end. C = 5.5, K = 0.34, Q = 0.28, 0.72.



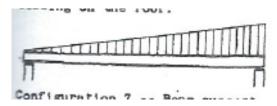
Configuration 4 – Beam supported at points two-tenths of length from both ends. C = 2.6, K = 0.25, Q = 0.50.



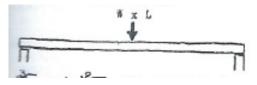
Configuration 5 – Beam supported in middle and at points 14% of length from each end. When not loaded the beam touches all three supports. C = 1.2, K = 0.16, Q = 0.32, 0.36, 0.32.



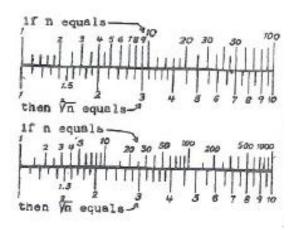
Configuration 6 – Beam supported on both ends. Loading varies proportionate to distance from one end, from zero on one end to W pounds per foot on the other. C = 7.5, K = 0.29, Q = 0.17, 0.33. This configuration occurs in round structures with uniform loading on the roof.



Configuration 7 – Beam supported on both ends has concentrated load in the middle. C = 19.3, K = 0.43, Q = 0.50. (Note: The load plugs go into the formulas as W x L, not just as W.)



 $3\sqrt{1}$ and $2\sqrt{1}$ are called "cube root" and "square root." For example $3\sqrt{8}$ is 2 (because 2 x 2 x 2 x 2 = 8) and $2\sqrt{25} = 5$ (because 5 x 5 = 25). Cubed root and square root may be obtained from the following scales, off a slide rule, from a book of math tables, or by trial and error.



I add this to W_c to get the total weight per foot of length: $W = W_b + W_c$.

If W is more than 10% greater than W_c I recalculate D using W. I repeat this until W [?] changes less than 10% from previous trial. (If I need do this more than once, it indicates that the configuration is inefficient. I redesign, using more points of support to reduce the diameter required.)

Weight of the beam equals length times weight per foot of length: L x $W_{\rm b}$.

Example 1, Continued: W_c is 64 pounds per foot (calculated before). Suppose the beam is 10 feet long, is uniformly loaded, and is supported at points 2 feet from each end as shown in Configuration 4. Therefore C = 2.6 and K = 0.25. The wood is not very strong with B = 500 and H = 20. Plugging into the formulas:

$$D_{b} = \sqrt[3]{\frac{10 \times 10 \times 2.6}{500} \times 64}$$

$$D_{b} = \sqrt[8]{\frac{10 \times 2.25 \times 64}{20} \times 64}$$

After doing the multiplying and dividing inside the root signs I get:

$$D_b = 2\sqrt{8} \text{ or } 3\sqrt{33.3}.$$

I look up 8 on the n scale and read 2.8 on the square-root-of-n-scale. Likewise I find 33.3 on the n scale and take the number at that point on the cubed-root-of-n scale, which is about 3.2.

3.2 is the larger answer so this means the beam must have sound wood at least three and two tenths inches in diameter. Calculate its weight per foot:

$$W_b = 3.2 \text{ x } 3.2 \text{ x } .022 = 2.2 \text{ pounds per foot}$$

I add this to the weight supported by the beam to get total weight:

$$W = 2.2 + 64 = 66.2 \text{ pounds/ft}$$

Since this is less than 10% greater than 64 I need to recalculate D.

Weight of the beam is $2.2 \times 10 = 22$ pounds. Of course I will not be able to find many trees exactly 3.2 inches in diameter so many of the beams will be somewhat heavier than 22 pounds.

Post placement makes a big difference in diameter required. If the beams were supported at the ends I would need a beam at least 5.9 inches in diameter and weighing at least 77 pounds (calculations not shown).

Strength of wood has less effect (with beams). If the wood were twice as strong required diameter would go down to 2.5 inches.

So far I have assumed that the beams are horizontal and pressure upon them is perpendicular to their length. Most often beams are slanted for snow or condensation run off and/or because one end rests on the ground. The slant may be disregarded provided the beam is not also a post or prop. (For other cases, see section further on.)

POSTS SUPPORTING BEAMS: To calculate the vertical force (P) exerted on a post by the beam it supports. I use the formula:

$$F = L \times W \times Q$$
 pounds

L is the length of the beam and W is total weight per foot of length of beam (as before). Values of Q are given for each configuration (previous illustrations). If more than one value of Q is given it means that the forces on the various posts will be different; the order of values is the same as the order in the illustration (left to right).

After finding force on a post I calculate its required diameter with formulas:

$$D_{p} = \sqrt{\frac{11.5 \times F}{B}}$$
 inches
$$D_{p} = 0.4 \times L_{p}$$
 inches

I take larger answer. B is the bending strength of the wood (as before). These formulas assume that the post is round and fairly straight (Appendix 4). Dp is diameter of sound wood only, excluding bark and rot.

If a post is held only at the top and bottom (usual case) L_p is the total length of the post, including portion underground. If a post is supported

only by the ground and not braced at all - i.e., neither the top of the post nor what it supports is guyed, set L_p equal to twice the length of the portion above ground. If a post is very firmly braced or guyed with steel cables at intermediate points in all directions (at least three guys) then L_p is the length of the longest unbraced section.

Example 1, Continued: With configuration 4, Q = 0.5. So the force on each post is:

$$F = 10 \times 66.2 \times 0.5 = 331 \text{ pounds}$$

Suppose the post is to be 5 feet long, total length, and will be guyed at the top. B is 500, as before.

D_p =
$$\sqrt{\frac{11.5 \times 331}{500}}$$
 OR 0.4 x 5
= $\sqrt{\frac{2}{7.6}}$ OR g
= 2:8 OR 2 inches.
So the post must be at least
2.8 inches in dispeter.

So the post must be at least 2.8 inches in diameter.

FOOTINGS: In rocky/gravelly soils I have not had trouble with posts settling further into the ground so long as the bottom of the post is below frost line.

SUSPENDED ROPES AND FABRICS: to calculate the tension at the support points of a uniformly loaded rope, I use the formula:

$$T = \frac{s \times w}{2} \times \sqrt[2]{\frac{s \times s}{c \times c \times 4} + r}$$

S is horizontal separation in feet between points of support. W is weight supported by rope in pounds per foot of separation of support points. G is vertical distance in feet by which the middle of the rope sags below the support points.

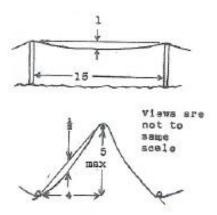


If the rope is fairly taut, I use this formula even if the support points are at different heights. (See Appendix 5). In this case G is the vertical distance between the rope and a point halfway between the two supports (as in the illustration above).

To calculate the breaking strength required I multiply tension (T) by a factor of safety of 2-to-10, depending on how destructive a failure would be and on the elasticity of the rope. (An elastic rope such as nylon will stretch some before breaking, increasing the sag and thereby reducing the tension.)

I use this same formula to calculate the tension of plastic or cloth which is suspended. Here I use pressure per square foot of plastic in place W. The answer will be pounds tension per foot-width of plastic.

Example 2: A tent is rigged by laying polyethylene film over a ridge rope and tying out the sides. The rope is braced over the tops of two poles, 15 feet apart. A one-inch-wide strip of 6-mil poly breaks with a pull of 10 pounds, after stretching considerably.



I assume that snow will slide off the plastic; so the greatest force will be due to wind. If I do not expect a wind faster than 20 mph:

 $Pw = 20 \times 20 \times 0.003 = 1.2 \text{ pounds per foot}^2$

Tension in each foot width of plastic:

plastic:
T = 4 x 1.2 x
$$\sqrt{\frac{4 \times 4}{4 \times \frac{1}{8} \times \frac{1}{8}}}$$
 † 1

To calculate the intervals at which I must tie out the sides, I will assume that each tie grips a 4-inch-wide swatch of plastic (approximately true if the tie is around a one-inch-diameter rock). Since the plastic has a strength of pounds per inch, the strength of each tie will be $4 \times 10 = 40$ pounds.

If I want a two-to-one safety factor I must tie to the plastic at intervals of 40 divided by $(10 \times 2) = 2$ feet.

A small factor of safety is probably sufficient here because failure will not result in injury.

To redesign this tent for stronger winds (desirable if it is to be used the year around), I would drap[e] the plastic over three ropes and anchor each side firmly to the ground with rocks.

Each side of the tent may pull on the ridge rope so I use $2 \times 10 = 20$ pounds for W. Force will probably be less because the sides are at an angle to each other, and because both sides won't receive full wind force. Calculating tension in the rope:

T = 15 x 20 x
$$\sqrt[2]{\frac{15 \times 15}{4 \times 1 \times 1} + 1}$$

= 1150 pounds

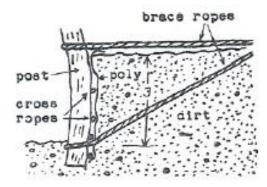
If I want a three to one safety factor I will need a ridge rope with a breaking strength of 3500 pounds, which is a strong rope. I can reduce tension in the rope by allowing greater sag or by adding a brace in the middle of the tent.

If the posts even bear [?] the full tension of the rope (conservative assumption if the guy ropes incline to the horizontal at less than 450), and are 6 feet long and of wood with B equal to 500, the diameter required is:

So I must cut posts which are at least 5.1 inches in diameter.

RETAINING WALLS: A post which is part of a wall holding back dirt bears loads similar to a beam in Configuration 5 and is calculated the same way.

Example 3: A retaining wall is formed by posts 2 feet apart supporting cross ropes 5 inches apart at the bottom which in turn brace polyethylene film. It holds back dirt 3 feet deep.



The soil pressure at the top is zero. If the soil weighs 100 pounds per cubic feet, pressure at the bottom is:

$$P = 100 \times 3 = 300 \text{ pounds/ft}^2$$

The cross ropes are spaced five twelfths of a foot apart so:

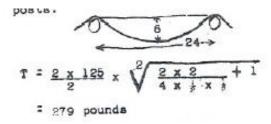
$$W_c = 300 \text{ x } 5/12 = 125 \text{ pounds per foot}$$

If I use 6 mil plastic, number of layers required at bottom is:

$$N = 125/36 = 4$$
 layers

Part way up the wall, where pressure is less, I may economize by reducing the number of layers or putting the cross ropes further apart. If I do the latter at $1\frac{1}{4}$ [?] feet depth the ropes may be 11 inches apart, etc.

If I leave enough slack in the rope so that it will sag inward 6 inches (1/2 foot) between posts:



With a safety factor of two, I'll need rope with a breaking strength of at least 556 pounds. This should be [a] sufficient safety factor because any stretch of the rope will increase sag and reduce tension.

Since the post is like a beam in configuration 6, C = 7.5 and K = 0.29. Strength of the wood is as before. Separation (S) is 2 feet and pressure at the bottom is 300 pounds/ft².

W = 300 x 2 = 800 pounds per
foot of length of post
D =
$$\sqrt{\frac{3 \times 3 \times 7.5 \times 600}{500}}$$
 = 4.3
D = $\sqrt{\frac{3 \times 0.29 \times 600}{20}}$ = 5.1

So I'll select timbers which are at least 5.1 inches in diameter. Since the posts are vertical I do not include their weight.

For calculating forces on the brace ropes in Configuration 6 is 0.17 and 0.33. Force on the bottom rope: $F = 3 \times 600 \times 0.33 = 600$ pounds.

(Force on the bottom rope is slightly greater than that because it is angled, assuming the soil takes no load at all.) Unless the bottom of the post is embedded among large rocks I do not depend on the soil to hold it.

With a safety factor of 3, I'll need a rope at the bottom having a breaking strength of 1800 and a rope at the top with a strength of 900 pounds. (Calculations for top rope not shown.)

POSTS SUPPORTING BOTH BEAMS AND RETAINING WALLS: I calculate the diameter for each use considered separately, then choose the larger. If the post has any curvature, I POSITION IT SO THAT THE CONVEX (outward curving) SIDE IS TOWARD THE DIRT being held back. (See figure in example 3.) This way the effects of the side load counteracts the effects of the top load.

Example 3, Continued: The posts also support the beams in example 1. As previously calculated, beam support requires that the posts be at least 2.8 inches in diameter. So I use timbers at least 5.1 inches in diameter.

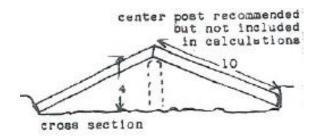
INCLINED TIMBERS SUPPORTING EACH OTHER: I calculate each timber as a beam and as a post supporting other beams, then choose the larger value. The force (F_p) I use for calculating post diameter is:

F is the force the timber would exert if supported by a vertical center post. L is length of timber and E is difference in elevation of its ends.

Caution: Forces may be much larger in this configuration than if beams rest on vertical posts. And the less the slope of the beams, the GREATER the forces. The bottom end of each timber must be SECURTLY ANCHORED – else it will push out and the structure will collapse.

I recommend addition of a center post for safety if the timbers and what they support are heavy enough to damage someone underneath, and if slope of the timbers is less than 45° (less than one foot elevation for each foot on the level).

Example 4: The main frame of a square structure consists of four tenfoot-long timbers which butt together at the top. The top ends are 4 feet higher than the bottom ends. Each beam, at its bottom end, supports 10 square feet of surface per foot of beam length. The surfacing materials and cover weigh 32 pounds per square foot. Strength of the wood is B = 500 and H = 20.



Considering as beams, the timbers are in Configuration 6, so C is 7.5 and K is 0.29. Weight per foot of beam (maximum, at bottom end) is:

$$t_c = 10 \times 32 = 320 \text{ pounds/ft}$$
Calculating diameter:
$$D = \sqrt[3]{\frac{10 \times 10 \times 7.5 \times 320}{500}} = 7.9$$
Ok 2 \[\frac{10 \times 0.29 \times 320}{500} = 8.8

Weight of timber per foot:

$$Wb = 7.9 \times 7.9 \times 0.22 = 13.7 \text{ pounds}$$

$$W = 320 + 13.7 = 334 \text{ pounds/ft}$$

Since this is less than 10% larger than W_c diameter need not be recalculated. Total weight of timber (minimum) is: 13.7 x 10 = 137 pounds, which is heavier than desirable for easy handling. If each beam rested on a vertical center post, force exerted on it (Q is 0.17, Configuration 6) is:

$$F = 10 \times 334 \times 0.17 = 555 \text{ pounds}$$

But the supports are not vertical so I calculate:

This force is applied by each timber to the timber opposite. Diameter required as a post:

$$D_{p} = 2\sqrt{\frac{11.5 \times 1390}{500}} = 5.7$$

$$D_{p} = 10 \times 0.4 = 4 \text{ inches}$$

So 7.9 inches is sufficient diameter, provided that timbers are straight or are positioned with any curvature upward.

The force exerted on the soil by the bottom end of each timber is 2760 pounds (Calculations not shown).

The weight of the main timbers can be reduced by using more of them. But, unless there is a means of distributing the center forces evenly among the timbers (such as padding) each timber must be capable of bearing the trusts of all opposite timbers and thus must be at least 5.7 inches in diameter. (This is another problem that would be avoided by using a center post.)

If I used 8 main timbers instead of 4, I could reduce the minimum diameter of each to 6.3 inches, giving a minimum weight of 87 pounds (calculations not shown).

If I add a center post, it must support the vertical forces applied by all four (or however many) beams: $555 \times 4 = 2220$ lbs.

$$D_p = \sqrt[2]{\frac{11.5 \times 2220}{500}} = 7.1 \text{ inches}$$

SCALE MODELS: If building one, I recalculate for the smaller size, keeping the stresses and safety factors the same. I don't simply multiply all dimensions by the scale. (A creature the shape of a daddy long legs but the size of an elephant couldn't stand.)

Example 4, Continued: Suppose I am building a half-scale model – main beam to be 5 feet long. Since snowfall, etc., will be the same I assume the same weight per square foot of covering materials (i.e., I do not scale the weight of cover.)

$$W_{C} = 5 \times 32 = 160$$

$$D = \sqrt[3]{\frac{5 \times 5 \times 7.5}{500} \times 160}$$
= 4 inches

So I can halve the diameter of the main timbers and have the same stress. (If I had halved the covering materials, I would have to reduce the timber diameters to less than one-half.)

Appendix 1: The best West Coast sources we have heard of for plastic and rope: Plastic Sales Inc., 863 Folsom St., San Francisco, CA 94107 quoted (late '71) \$20 for one 100-foot roll of 20-foot wide 6 mil thick clear polyethylene film. Frantz Enterprises, 10907 Inglewood Ave., Inglewood, Calif. sells mill ends of poly rope and cord, various colors and gauges, for \$1 per pound or \$80 per hundred rolls at fairly low prices. Price are f.o.b. [Free On Board, meaning that the seller pays for transportation of the goods to the port of shipment, plus loading costs?].

Appendix 2, surfacing: The formula for calculating layers of polyethylene assumes that the plastic has a sag (G) equal to 30% of the separation between supports (S) (see section on suspension). Even if polyethylene is initially put [?} on taut, it will usually stretch and sag under load rather than tear. The formula assumes a breaking strength of about 10 pounds for a one-inch-wide strip of 6 mil.

To determine the strength of a fabric, cut a 1 ½ inch wide strip. Narrow it to one inch at one place. Tie one end to a branch and the other end to a pail. Gradually load the pail with soil until the strip breaks. (Note if

the strip stretches before breaking). Weigh loaded pail and subtract weight of empty pail.

Appendix 3, beams: Woods commonly used in construction range in strength from douglas-fir with bending strength of (B) of 1200 pounds per inch² and horizontal shear strength (H) of 40 pounds per inch² to eastern hemlock with B of 800 and H of 20. These values assume that the wood is often wet, has radial cracks for two-thirds of its diameter (illustration below) which mostly effects H, and a safety factor of three (douglas-fir, for example, probably will break with a bending stress of about 3600 pounds). For strength of other woods, consult a construction handbook and/or test samples – loading until they break, then calculating backwards.

The two different formulas for diameter (D) consider two different ways a beam can fail. If the formula containing B gives the larger answer, the beam will probably fail by bending – break in the middle. If the formula containing H gives the larger answer, the beam will probably fail by horizontal shear – the wood will split near one end, then break. The first mod of failure is most likely with long, slender beams, the second with short, heavily loaded beams.

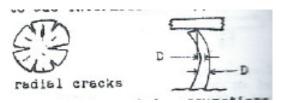
Configurations 2, 3 and 4 have the posts at optimum points (assuming uniform beams). For example, with Configuration 2, if the post is less than or more than three-tenths of the length from the end, C and K will increase and a larger diameter beam will be required. To calculate C and K for other configurations, see a mechanics of materials textbook. A knowledge of integral calculus will be helpful.

The formula for weight of timber assumes wood weighing 40 pounds per foot³ such as dry douglas fir. Common structural woods range from 30 to 60 when seasoned; more when green.

The formulas assume uniform diameter. But natural timbers taper from one end to the other. To be conservative I would choose a timber whose diameter at all support points is at least as large as the required diameter. If a timber is most apt to fail because of insufficient bending strength (the diameter formula containing B gives the larger answer), the timber is probably safe if diameter midway between supports is at least

required diameter if diameter at one support is a little less, provided there is not much overhang (Configurations 1, 6 or 7).

For a long span without intermediate supports, a truss made of several timbers and cables will be lighter than a single beam. In my work I have found it simpler to add intermediate supports.



Appendix 4, posts: Assumptions which I made in deriving the formulas for post diameter:

(1) EITHER post is short (less than ten times its diameter) and has eccentricity of loading equal to its diameter OR post is long (but less than 25 times its diameter) and has eccentricity of loading equal to ¾ of its diameter. One combination of post curvature and load off-center which has eccentricity equal to the diameter is shown above. Curved posts should be sawed so that the load rests near the convex side so that load off-center counteracts curvature (as shown).

The loading on a short post can be increased (or diameter for a constant load decreased) several times IF the post is straight, and the load is carefully centered and distributed on top of the post (possibly by heavy padding), and the post is only a post, not also a retaining wall. In this case the formula for post diameter is:

$$D_p * \sqrt[2]{\frac{1.3 \times F}{Cm}}$$
 inches

 $C_{\rm m}$ is allowable compressions parallel to grain. For most woods $C_{\rm m}$ is about $^{3}\!\!/_{\!\!4}$ of B.

(2) Post has free ends. While one end may be buried, the dirt around it may yield when wet, so I don't depend on it for stiffening the post. Effect of a fixed end is significantly only on a long post.

<u>Appendix 5</u>, suspension: I never calculated suspension forces before writing this article, mainly because I had not built any suspension structures in which a failure would be very damaging. Wind has ripped out

one or two ties in each of several small open-sided tents which were protecting supplies; other ties, the ridge rope and the supplies underneath kept the plastic in position. Now that I've figured out formulas, I intend to calculate before building anything I expect to use for more than a few days.

If the suspension points are at different elevations:

$$T_{h} = T \times \sqrt{\frac{1 + (4 \times 2 \times A \times A)}{A + (4 \times 2 \times A)}}$$

$$2 = \frac{0 \times G}{5 \times 5} \quad A = \left(1 + \frac{B}{4 \times G}\right) \times \left(1 + \frac{B}{4 \times G}\right)$$

 T_h is tension on higher support. T is tension calculated neglecting difference in elevation. S is horizontal separation of suspension points, E is different in elevation of suspension points, and G is sag of the middle, as before.

T will be less than T_h provided that G is less than:



Tension at the lower support is less than T in all cases.

I have assumed that the loading is uniform per horizontal distance rather than per length of rope. This best approximates most situations I have encountered and results in easier math. The two different assumptions give appreciably different results only if sag is very large.

WARMTH WITHOUT FIRE: COMPLETE PLANS FOR \$55 FOAM HUT By: Rayo

For several months during the past two winters, Haelan and I slept, ate, read, wrote, talked, loved and grew sprouts in a hut of polyurethane foam. Our foam hut made the difference between barely existing and being warm and comfortable during wet, cold weather, which is often the weather in Siskiyou from Nov. thru March.

The foam hut somewhat resembles a giant sleeping bag but has walls stiff enough to hold a definite shape. And, most important, an occupant is completely inside and breathes inside – diffusion thru the foam is sufficient to keep the inside dry and the air breathable. This solves the biggest problem of traditional bedding – the need to leave at least a nose out to breathe, and put an arm out to eat or read.

This design* is large enough for two 6-foot adults plus either a 4 ½-foot child or quite a few books, dishes and clothes (Figure 1). Length is 8 ½ feet. Width and height taper from 5 ½ by 2 ½ at the head end and 1 ¼ by 1 feet at the foot. Also shown are various possible configurations of occupants. The head-end height is sufficient to sit on a cushion and work on a low table.

With the hut shielded from wind, and with door and window closed, inside air will be about 40° to 50° warmer than outside air with two adults, half that with one. (Warming will depend on size and activity of occupants and on amount of padding underneath.) In the shade with door wide open, warming with two adults is about 10°F. Thus, with an outside temperature range between 10° and 65°, two people enjoy inside air between 50° and 75° – comfortable for most activities. In colder weather or for one person alone, the hut suffices for sleeping provided a sleeping bag or plenty of blankets are used inside.

Materials cost about \$55. One person can build the hut in one day but some steps in the assembly are easier with two. The hut weighs about 20 pounds.

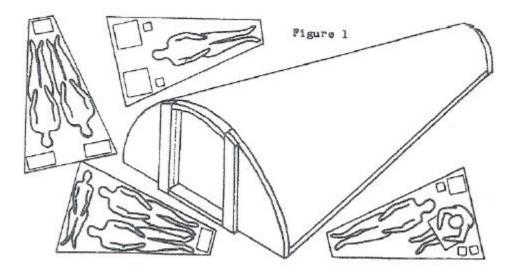
MODEL: I recommend first building a 1:6 scale model (2 inches equals one foot) out of newspaper. This will show the cuts and joins to be made and perhaps suggest changes to better fit your individual needs. Newspaper at 1:6 scale is not as stiff, proportionately as is ordinary two-inch foam, so if a model holds its shape, the actual hut probably will. Also make rough models of people and things which will go inside. If the hut will be built of 76 and 54 inch sheets, begin the model by cutting newspaper into 12 2/3 by 9 sheets. Make every cut and join as you will for the actual hut. Join with bits of tape.

MATERIALS for the basic hut (not including windows): 108 square feet of two-inch-thick polyurethane open-cell elastic foam weighing about 3 ounces per square foot (the lightest of the three weights of foam in Sear's catalog), and two quarts of foam cement. Foam is most commonly sold in 76 by 54 inch sheets for mattresses, in which case buy four full sheets. (A 54 by 54 inch piece will be left over which can be used for extra padding underneath or for window frames.) The foam MUST be open cell in order to "breathe". Test a piece by blowing thru it. Besides Sears and Wards, many stores listed in the yellow pages under "plastic" sell foam and cement. Test a cement on two small scraps of foam; if it is proper, the foam will tear before the cement gives way. I have used a special rubber cement costing \$6 per gallon.

For a door I suggest a 2 by 3 foot piece of styrofoam at least an inch thick, preferably two inches. Scrap styrofoam can often be found at motorcycle dealers (Japanese motorbikes are shipped in crates of it). If styrofoam can't be obtained, pieces of foam left over from the hut can be used. Another possibility: use two sheets of plexiglass, with an inch spacing between, to make a door which is also a storm window.

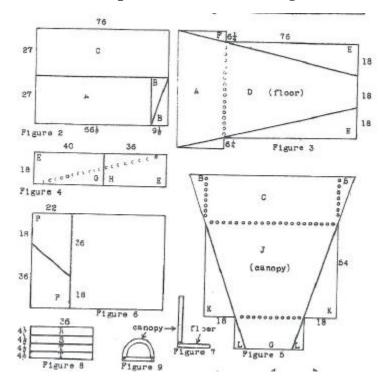
For a screen door use a 2 ½ by 3 foot piece of nylon mosquito netting, curtain material, or other fine-meshed plastic screening.

I use a felt market for marking, any long-bladed kitchen knife for cutting foam (with a sawing motion, a 1 to 2 inch wide paint brush for supplying cement, and a sizzors [scissors] for cutting screening.



<u>DIRECTIONS</u>: Accuracy within one-quarter inch is sufficient. A piece not quite the right size can be stretched or compressed slightly to fit.



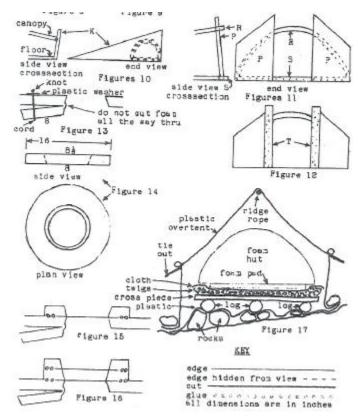


Glue A onto one end of a full sheet EDE (Figure 3). Cut off pieces E and F. AD is the floor of the hut.

Glue pieces E together along their cut edges to form a rectangle (Figure 4).

Glue B pieces onto the ends of C (Figure 5). Glue BCB onto one side of full-sheet KJK.

Cut HE to form G and H (Figure 4). Glue G onto the other side of KJK (Figure 5). Cut off pieces K and L. BCBJG is the canopy of the hut.



From a full sheet (or from a 22 by 54 inch piece) cut P pieces (Figure 6).

Glue one side of the canopy, a foot or so at a time, to one side of the floor of the hut (Figure 7).

Cut piece H lengthwise into strips R, S, T (Figure 8).

Glue the other side of canopy to the floor. This will be easiest if there are several assistants. If not, first tie or prop the canopy in approximate position. Glue a foot or two at a time (Figure 9).

Glue one K piece onto the foot end of the hut (Figure 10). After glue sets cut off K flush with the outside of the hut.

Curve the head end as desired, using props and weights. (A somewhat peeked roof and sloped sides provide the most head room for someone

sitting. A flat roof and sides curving to vertical provide the most storage room at the sides.) Glue both P pieces onto the head end of the hut (Figure 11).

Cut R and S to fit and glue onto the head end (Figure 11). These are attached so that their 4 ½ inch sides are horizontal.

Glue the T pieces on each side of the opening, flush with the edges of P (Figure 12).

If a somewhat peaked roof is desired, an additional piece above 4 and between P and P may be necessary to hold this shape. This piece can be formed from scrap.

Trim P and T to within an inch or two of the canopy (which gives most stiffening), flush with the canopy, or however you like for appearance.

Trim door about one inch wider and one-half inch higher than the opening for snug fit. If polyurethane foam is used for the door, glue extra strips of foam around its edge for stiffening.

Fabricate a screen door out of coathanger wire and netting. Fold the netting over wire and sew.

Save the larger scraps of foam for window framing and for additional reinforcement of the head end, should this prove desirable. Small pieces may be chopped up to make stuffing for pillows.

Allow hut to air thoroly [thoroughly] before occupying; cement fumes are toxic.

WINDOWS: I suggest trying out the hut without windows, then adding as desired. The foam itself passes considerable light at first, but darkens some with age. The best locations for windows depend on the rainshelter within which the hut is used and the direction it faces. Windows located at the head end will interfere least with rolling (for transporting).

Any transparent, flexible plastic may be used for windows; preferably a material which will produce sunlight.

Make windows small, round and spaced far hut and cause sag. For an 8-inch window, cut the opening 8 inches in diameter on the outside and about 8 $\frac{1}{2}$ inches on the inside by angling the knife. This tapers the cutout

piece and allows it to be reinserted easily and snugly from the inside for greater warmth at night. This piece may be left attached to the hut by an uncut flap of foam, and held back by a loop of cord when light is wanted. The plastic washers, which prevent the cord from pulling thru the foam, may be cut from scraps of window-pane material (Figure 13).

Cut a 12-inch diameter piece of plastic for a pane. Cut a collar (doughnut) of foam with 8 and 9 inch inside diameters (tapered) and at least 16 inches outside diameter (Figure 14).

Place the pane over the opening on the outside of the hut and the collar over the pane. Glue the collar to the hut. The glue probably won't adhere to the pane but the collar will hold it in place (Figure 15).

If daytime temperatures are often low, I would add a storm window by gluing on a second pane and collar (Figure 16).

OVER-SHELTER: To keep one warm and dry, the foam must be sheltered from the rain, snow, dew, and wind. A small tent can be rigged out of polyethylene film (see Figure 17, also article this issue). A 24 by 16 foot piece can be formed into a low tent 16 feet long by 7 feet wide — large enough to contain the hut and provide a 6 by 7 foot sheltered area beyond the head end.

Rig the over-shelter at least 6 inches above the surface of the hut so that moisture will evaporate. During wet weather when the hut is occupied for long periods, droplets of water condense on the outside of the upper portion of the hut, however the inside has remained dry.

Shade the foam hut from direct sunlight which disintegrates foam – about one-fourth inch a year. The hut will last longer and stay cleaner if outside is covered with cloth (we haven't). The cloth must be permeable, not waterproof. A dark cloth will also provide black-out (dim-out at least) when a light is used inside at night.

FOUNDATION: Extra padding underneath increases both comfort and warmth – weight compresses foam, reducing insulation effect. A piece of foam 4 by 4 feet by 2 inches is sufficient; 4 inches is better, especially if what the hut sets on is lumpy. Place the pad beneath the hut from shoulders to knees, which is where most of the weight rests. Or use dry moss or leaves or grass with scraps of cloth between it and the foam so that small particles do not work their way into the foam.

If the hut and padding rest directly on a ground plastic, body moisture which diffuses thru the bottom will condense on the cool ground plastic and create damp spots. At a temporary camp during fair weather the bottom may be dried off by rolling the hut onto its side for part of each day. At a more-permanent camp I guild a platform out of recently-dead logs and branches 6 inches or more above the ground. This also keeps the hut dry during heavy rains when water may run along the ground.

I put rocks down first for leveling and stabilizing the logs, then I lay down a piece of plastic. I put down three logs 4 inches in diameter or larger, angled to match the taper of the hut. (Three main logs rather than two allows the use of smaller and curvier cross pieces.) I place cross pieces about 2 inches apart, using 1 ½ to 2 inch diameter pieces (not counting bark) from the head end to the hip area, smaller pieces at the foot. I do not debark logs but I smooth off sharp branch stubs. On top of the cross pieces go fine branches, dry ferns, leaves, etc., then scrap cloth, then foam pads if any, and then hut (Figure 17).

BEDDING: We have used regular sheets and blankets inside the foam hut. Bed-straightening chores may be reduced by cutting and sewing two sheets together into a tapered envelope (we haven't).

TRANSPORT: I remove the door (if stiff) and anything in the hut, then roll up, starting at the foot. I wrap a tarp around it and tie in several pieces. The bundle is bulky but backpackable. After unrolling I put a couple of branches inside as props to speed restoration of shape. Our hut has been transported four times this way without apparent damage.

ARTIFICIAL LIGHT AND HEAT: Foam is highly flammable. Be very careful with flame. We have used a kerosene lantern within ours without trouble; leaving the door partway open for ventilation.

*Our present foam hut differs from this design. The head end is cylindrical rather than conical (maximum width is 4 ½ feet) – not as stiff a shape – and is further weakened by large openings in the sides for door and windows. I added extra pieces around the door and window for stiffening but, even so, the cylindrical portion sags if not braced. To brace it I tie two

cords from the top to the ridge rope of the overtent. Other shortcomings: closing the side door snugly is difficult; a side door is not compatable [compatible] with a minimal size overtent; the maximum height (2 feet) is not quite enough for comfortable sitting. The design here is an attempt to correct these problems.

WARMTH WITHOUT FIRE: STEPHENSON'S TENT LINER Review By: Rayo

"A unique new insulating liner, now being made for the Warmlite tents, eliminates the need for sleeping bags. The unit hangs from the tent and provides a warm insulated compartment for two, equivalent to two down bags with 4.8" of insulation, yet is fully adjustable for warmer weather. Polyether foam pads underneath provide bottom insulation and comfortable padding...The packed bulk is less than a single down bag...The Filmgap insulation consists of 10 layers of aluminized plastic film with 3/4 inch airgaps between layers. The unit is constructed like a small wall tent hanging from the tent frames. An oversize end closure at the neck end permits the user to sleep with head outside of the liners, but inside the tent, thus eliminating need for a hood. The neck closure may be regulated for any amount of ventilation for warmer weather use, being tied completely open at about 60°F. When not needed during the day, the liner can be easily detached at the front end and folded into the back end of the tent thus making the full tent space available for use.

"The wind stability of the tent assures only convection free air between the film layers, thus providing efficient insulation."

Weight of liner plus pads is about 6 ¼ pounds; price is \$200 f.o.b. Stephenson's Model 7 tent, needed to support the liner, is \$162 (according to catalog received late 1972).

The above is all the information on Filmgap that is in Stephenson's catalog; several questions asked were not answered, including: Can one breathe within the liner, or MUST one's head be left out?

The inside dimensions of the liner were not stated but, calculating from dimensions of Model 7 tent, it may be about 45 inches wide by 30 inches high.

Based on Stephenson's chart for down insulation, Filmgap provides about 55° of warming with two people and would be sufficient, by itself, down to 20°F.

Apparent advantages compared to a foam hut: makes a much more compact bundle for backpacking; less weight; ready made. Apparent disadvantages: opaque; expensive.

Stephenson's address is 23206 Hatteras St., Woodland Hills, Calif. 91364.

The catalog gives the impression that Stephenson's equipment (including sleeping backs and pack frame) is well designed for lightweight overnight camping.

BUS REBUILDING By: Al Fry

Mobile living started for me the day I passed a car lot which had a dilapidated \$150 travel trailer which I couldn't pass up for the price. I pulled it post haste to a friend's secluded orange orchard and decided that this sure might be the way to solve the problem of rent. One thing led to another and we would up pulling that trailer all over sunny Southern California, often sagging from the overload of junk or jetsam.

Pretty soon I got tired of trying to find suitable free spots to leave it while exploring an area or working, so we went on to an ancient U.P.S. truck which should have solved the problem but didn't. What it did do was point out the many mechanical problems one could run into. Sparing the details I hope that what scant bit of experience we later piled up will help someone else going the same path.

Several step-vans later I finally figured I had my ultimate vehicle when fate interceded again and I had a mate with a son and dogs. Well, to shorten the story, I laid out about 1500 bills with trembling fingers and became the hesitant owner of a gigantic 35 foot "48" Crown bus. Vans are one thing but flat-front buses are something else again.

Over the next six months or so we gained a lot of savvy on just how cheap one of these things can go together and still be presentable. The first surprising bit of luck was learning that one can usually get seconds and left overs from the trailer and camper builders who seem to be scattered all of S. Calif. Paneling for instance never ran us over a dollar a sheet and the more expensive hardware like sliding valve toilet, small water heater, and stove were usually less than a fourth of the new cost. An initial trip to our local dump quickly supplied us with the 2 x 4's and insulation to get things underway. (\$2 a load is average scavenging rate.) Most of the lesser hardware came from swap meets where many trailer factory workers brought a lot of miscellaneous, and persons often unloaded unique gear from the past. Prize possessions on the "unique" list were one brass leverhandle water pump to supplement the electric jobby and various pieces of antique hardware and bric-a-brac.

I have always searched high and low to get my hands on good stainless steel tanks for putting under my vans, but I stumbled across a real winner when I found out about the industrial Teflon-lined barrels now in use. These barrels can be found in 25 or 50 gallon sizes, and for a few dollars you have a rustproof first-class water or holding tank. Any industrial section of a large city will have scads of them around and some of the big buses will have enough room underneath to put the big 50 gallon jobs. I used heavy strap iron cradles to hold them and connected little electric pumps to them although I am about to replace this constant line pressure pump with a constant barrel pressure air pump which will use less to push a given amount of water. They are a little more trouble free as a bonus. We used some surplus transparent hose to hook up all the faucets. I have found that ordinary garden hose is too chintzy and rubber taints all the water that goes through it. Camper supply stores have a good cheap hose. I had given copper some thought but one good accidental freeze would have split it open and who can afford copper. I have insulated pipes and tanks but didn't on the bus in hopes a half-filled round tank wouldn't split and the very flexable [flexible] clear stuff would give enough.

Generally speaking I have found that the more insulation one can get UNDER *er* rig the better. The sides and top should get insulated but often the factory insulation will suffice IF one puts a layer of something over the metal interior. Wood paneling does the job. Rubber-backed carpet glued down with contact cement is even better and regular carpet is better than nothing. Our bus bedroom is carpeted ceiling to floor in warm carpet that cost next to nothing because it was leftover material – large pieces would need cutting up anyway.

By far, the best thing to have on a floor is rubber backed commercial carpet although it is really hard to find at any reasonable price. Linoleum is okay if it isn't in squares, which soon loosen up. And long shag rug is totally impractical.

Some innovations that are very nice include a clear plastic or glass skylight and light proof window covers all around. The skylight can be incorporated into the ventilation cover if it is fairly large and the savings in lighting fuel will make the effort worth while. In cold weather this skylight should have a double layer of glass as well as the windows if possible, although a plastic film can be put on in a pinch.

Cold weather is really hard to combat in a bus or van and I always try to have sliding heavy curtains to cut off window areas and the front end driver window area from the more insulated section. After trying about everything I could think of to heat my various mobile shelters, I found the solution in the good ol' wood stove. The pressure and wick kerosene burners, the catalytic heaters, LP gas – they all have drawbacks for the full time "outbacker" or penny pincher. If at all possible give the LITTLE pot bellied wood burner a chance – wherever you go, the fuel will probably be laying around waiting for you. A good armload will keep you snug all day and a little coal or hardwood will get you through the night. Even if daytime smoke will give you away where you are you can always stoke up after dark.

Get a good quality (will have a grate) stove with a five inch pipe and fix yourself a fairly heat-resistant and leakproof opening. The heat can be excessive at ceiling if a vent (preferably adjustable) is not available. If your rig is paneled at ceiling you will need a larger pipe to catch heat around the smaller five-inch pipe and carry it out so as not to scorch wood. Set the stove near and facing the door so you won't dribble splinters and ashes on your floor, and set it on a metal catch basin or scorch sheet. You can fix a carrier under your rig to hold your stovepipe when you are in cities and prefer to be less conspicuous. It is usually simple to put a choke (damper) in the pipe to adjust the flu draft and save wood. And add a screen spark arrestor. Ashley Stoves are the ticket for cabins and such, but the little flicker of flame required for a tight little van can be had from most any stick burner.

As far as name brand goes, keep in mind that you will probably wind up needing parts sooner or later and off-make vehicles can be a waste of all your loving labor if parts are scarce. Buses are really "bad news" when they start to have mechanical problems.

Dual wheels are desirable even though they need a little more gas to push them along – seems like I just keep collecting the exciting little goodies that civilization fosters and a single-wheeled rig I had got to the point of sinking down in warm parking lot asphalt pavement.

I believe in smaller engines but this is also derived from my pennypinching approach which in turn comes from my dislike of sweating out my life for some members of the domination class. Problems can occur with fire and I have parts gleaned from a rig that went up in flames from carelessness. Another friend lost a good converted van when he loaned it out to his good but insolvent friend. Provide for every emergency and take double precautions.

Still and all, considering the good and bad points, van and bus living is about the best money's worth of shelter to be had and, like adding rooms to a house, one can always get another one.

CHOOSING A VAN FOR LIVING ABOARD By: Rayo

During the past five years two of us have lived in a motor vehicle three-quarters of the time and in various tents one-quarter of the time. The following are based on our experience and that of personal acquaintances.

Don't expect high vonu in a van. Have "acceptable" ID. A four-wheeled vehicle needs/makes trails and so is difficult to hide well. We have really tried, yet even in our most secluded squat spots, we get hassled (asked impertinent questions) once every couple of years or so. Nevertheless a camper or van may be ideal for someone in transition out of that society – ours has served us well this way.

Don't plan to travel much unless you have plenty of money. Don't buy a cheap well-worn van to move across the continent in unless you are already a fairly-skilled mechanic. Overall costs per mile of a "one-ton" vehicle will be about double those of a small imported automobile.

Single-piece vehicles (vans and motorhomes) and pickup campers both have their advantages. A van is lighter, sturdier has a lower center of gravity and is less wind resistant. Campers are mass produced and often cost less for the same comforts, may be more flexible, and cheaper to license in some states.

Buy instead of build, unless you are already experienced. The money you save building your own camper or making major changes in a van will be a very low return on your time. The experience gained is not very useful except for building more campers. If you do build, don't expect to achieve the overall quality of a factory-built until your *second* one.

Have at least a one-ton vehicle (at least 9000 lbs GVW); maybe oneand-one-half or two-ton. But check out the idiosyncrasies of the extorters in the states you expect to license and drive in. In many states vehicles over one-ton rating are supposed to stop at weigh stations and have commercial plates.

Have plenty of traction and a very low-speed bottom gear for getting off the road. Four-wheel drive is often desirable though expensive; next best is dual-rear wheels with most of the weight on them. VW microbuses and most three-speed standard transmission vehicles don't have a low enough low gear.

Avoid vehicles much longer than a big car -20 feet - and trailers if you will go into cities or off the road much. Two small vans are more expensive than one big bus, but handier. Also beware of campers with long low overhang.

Furnishings recommended for living aboard most of the time: good insulation; furnace with exhaust vented to outside (I like a propane floor furnace with pilot for quickness of heat, simplicity and no smoke; a very small and light wood stove would be nice for backup); good ventilation; screens on all openings; cooking stove, probably propane, at least two burners; sink draining to waste-water can which can be removed for emptying; five gallon water with spigot which can be set over sink for use, taken down for filling and when moving; propane lamp (or possibly Alladin kerosene lamp) for main light with 12 volt bulbs for quick light and backup; dual batteries; dual propane tanks; polyurethane foam pad for mattress — light, fairly cheap, doesn't mildew; black-out shades or drapes over all windows; plenty of cabinets, closets, drawers and work surfaces. Ideally most bulky furnishings — cabinets, sinks, tables, etc. — are firmly mounted yet easily removed for use of vehicle for hauling — this I haven't seen in factory builts.

Furnishings not recommended: any appliances such as refrigerator or air conditioner which use 120 volt electricity in quantities too large to be supplied by an inverter; john hard-mounted on the vehicle (if a flush toilet is wanted, get Portapotti or a similar make which is a portable self-contained unit and can be removed for emptying); vehicle-mounted water system (we have one but leave it drained much of the year so we don't have to worry about freeze-up); shower and hot-water heater (again, we have one but find we'd usually rather jump in a creek, even in January, or take a sponge bath than spend a half-hour removing impedimentia from the shower, filling the tank, turning on the heater, etc.); unvented heater (fumes are harmful).

Minimize windows in a van if it will be in a city much. I'd consider a skylight (but not a bubble top unless it was somehow retractable).

Squatting and permission-parking both have their advantages and drawbacks. If squatting, one pays no rent. And one has a greater choice of spots including more secluded locations and so is less frequently hassled. Parking with permission, one spends less time finding spots, and is less likely to have to move when hassled – which can be important if one is in the middle of a major overhaul. Permission parking doesn't offer greater security – bludg insist on access to all trails and bludg usually first ask for ID. "We have permission to park here; you can check with our landlord" isn't a sufficient answer. Squatting for up to two weeks – sometimes longer – is legal on all land not otherwise posted. Chances of being prosecuted for trespassing are practically zero so long as there is no littering, open fires or vandalism; few land-owners wish to provoke people – too easy to set grudge fires. After several years experience we find we squat about 80% of the time; permission park about 20% of the time.

A SMALL BOAT FOR LIVE ABOARD By: Paul Doerr

Soon, maybe by the time you read this, I will be living in a small boat. I came to California from Lake Erie in an 18-foot sloop, but sold it as too cramped even for one, and I hope to leave here with a good companion. So I made a list of what I did and didn't want, designed it all into 25 feet, and built it.

My new boat is turtle deck for water shedding and more headroom below; double end for better sea characteristics; twin keel for shallow water and cross ocean sailing; free standing, stayless but stowable, short mast for no jibing, sail wear, better sailing characteristics and capability to stow ALL gear including the mast in the locked cabin; three compartments, one about 12 feet long to live in and two to store stuff in out of the way; positive, poured in place flotation so I CAN'T sink; diamonded, an ancient Chinese invention; barndoor rudder for better control and less turbulence; hand tiller for simplicity – the less fancy the less to break; Chinese junk type sail rig – another ancient Chinese invention – the most efficient, durable, least expensive in the long run, easiest handling sail known; water tanks below and on "floor" to store enough water for some months at sea, also the water adds ballast on the keel while sailing; dry food stored in plastic containers to provide additional "life preserver" flotation; a built-in treadle sewing machine (foot operated) for sail and clothes repair; kerosene lights to end dependence on electricity; a wood-burning, pot-bellied stove so I can cook and heat with driftwood or wood I cut on shore; two heavy posts, one at either end, so I can use the anchor rope, a block and tackle and a buried anchor to drag the boat up onto the shore if I find a place where I want to stay for awhile; ALL fittings thru-bolted so nothing will break out in a storm, etc.; solid mahogany frames and stringers; two layers of 3/8 plywood and one layer of fiberglass over all, on hull and deck for strength; a doghouse, sliding or solid over the cockpit so I can sail in comfort in bad weather.

I'd like to find several boats to sail in company, perhaps all over the world, keeping together during nights and storms by using c.b. radio as a sort of rough distance/direction indicator for communications, of course.

By someone always watching the fleet while others are ashore, nothing will be lost or damaged. Foods can be bought in quantity and divided among the fleet. (Reprinted from PIONEER, page 222.)

FREE CITY SHELTER AS A GUEST By: Lan

Suppose I must go to a city and live there for several months while earning more money. It's winter so I'd rather not live in a tent in the wild part of a park. Either I don't have a vehicle or it's too little and too cold for street squatting. An apartment is expensive and there may be a lease or other complications. Sharing an apartment with just anyone is apt to be unpleasant if it's crowded. If it has room enough to keep out of each other's way it's probably as expensive as separate smaller quarters. A room just for sleeping is no good if I want to keep out of restaurants. I might find a room with kitchen privileges but it may also have a suspicious landlord who is buddy-buddy with the bad guys. A commune will work only with people all on the same trip and not always then. And getting one together takes more time and energies than I could afford. House sitting is nice for somebody who can arrange it, but that's not easy for somebody not around town. So what do I do?

Before heading to the city I make contact with people living there who are living conventionally but interested in things I am interested in. I learn of them through mutual friends, also through specialized little zines like VONULIFE. Better yet I already know people there. I make special note of people with extra room and similar family situations – single if I'm single, couples if I'm a couple, freeks if I look freek, streights if I look streight, etc.

I write to these people two or three times a year, even if it's only a note, so they'll remember me. I probably don't try to arrange a room with them by mail. I just get an invitation to stop by when I'm around.

When I visit I learn their housing situation. I don't have much gear and I'm used to living in small, odd places so I don't need much room. But I like a spot that's out of their sight and way most of the time such as an attic, big closet, corner of garage, etc.

If they and I hit it off well maybe they invite me to stay a few days. Or maybe I inquire if they know a place I can stay a short time.

I probably offer to pay and they probably try to refuse. But that's just one of the rituals of the insincere society which complicate things. If I don't

pay them some way I won't be very welcome next time so I must find a way. Maybe I can do chores — baby sit, fix doors, mow lawns, shovel snow, etc. But probably I'm working overtime or holding down two jobs to get back out as soon as possible. If I'm a woods vonuan I probably can't host them in return. I'm giving fellowship and information, and vonuans are usually interesting people to folks who they might like to try it some day. But it's not wise for me to assume that my words are more valuable than theirs. Maybe I find unusual things in my travels that make nice gifts for them. If not I'm back to money. If they don't want to take it from my face I leave it behind when I go.

I take care to cause them as little expense and inconvenience as possible.

I have my own bedding.

If they eat conventional, expensive food I do not eat with them except on special occasions. I try to be away during their regular meal times to the question doesn't come up. If I can't arrange that I can say I'm experimenting with a special diet. I prepare my foods at times when the kitchen is not in use. When I do eat with them I furnish some of the food.

I use the washroom when they don't. I always clean up my dirt and a little more besides.

I graciously accept when they ask if I'd like to join them in their rooms for socializing. But I hold down my exposure and extend my welcome by being out of the house during most of their waking hours. I read in a library or in my own space rather than in their living room.

I don't urge them to become like me. They have their own knacks and dreams. They and I can gain from each other at points of overlap.

In general I try to be a little vonuan who almost isn't there.

I have other invitations lined up so when conversations get stale I pack my gear, wish them the best and move on.

This way I can not only shelter myself in a city at low cost but live around pleasant and safe people.

TIME SHARE A HOME By: E.

Quite a few families are swapping houses and apartments on vacation. For example a family in New York who want to live in L.A. for a month gets in touch with a family in L.A. who wants to live in New York during that same month. They live in each other's apartments.

Two vonuan families who each want to live in a city every other year (or month, etc.) and in the woods every other year can rent a single apartment and take turns living in it. This could even be done by three or more families but it would get more complicated. They could also swap dwellings in the woods.

The families might also take care of each other's mail. Their mailing address stays in the city. The family in the city ships the mail to the family in the woods.

Both families could squeeze into one dwelling for a while if they have to, so it's not necessary for them to synchronize their movements exactly.

Each family should have exclusive use of a little space where they can leave things. This might be a big closet or part of one room.

FAR OUT EATING FOR \$10 A MONTH By: Haelan Hygeia

(This is a condensation of Haelan's forthcoming book, OUT OF SIGHT EATING, for which Haelan is seeking a publisher.)

To everyone who directly/indirectly helped create this book and to all noncoercive people who read it, it is dedicated. Thanks to Rayo for being cotaster, number-one dishwasher, and critic.

Introduction

Hello. This is Haelan. I live with Rayo, in the woods most of the time, out of sight, sound and mind. Out of our life-style has evolved the ECANES diet. That's what this book is all about. I talk mainly about what I/Rayo have actually done, because I think that is more valuable than how I THINK IT MIGHT be done by somebody else. But hopefully what has worked for us will work for you.

ECANES defined. Rayo and I buy foods with as many of the following characteristics as possible. In that way we are able to remain out of the S* society for longer periods of time. E is for economy, which is very important to us since the less we spend, the less we have to earn, and the less time and hassle we have within THAT society. Economical foods are also ecologically sound since they are sparing of resources.

C stands for compactness, which makes transporting easier.

A stands for appetizing [which] is what we like all our foods to be.

N stands for the nutrients that help keep us healthy.

E this time is for ease of preparation.

S is for storable without special processing.

Happily, ECANES qualities often go together. Wheat kernels, e.g., are more economical, more compact, more appetizing (I think), more nutritious and more storable than supermarket breads, pastries, and cereals, which are mostly air, additives and advertising.

*S stands for sick, sickening, sadistic, sordid, senseless, etSetera.

N.B. Because prices of different foods may vary from one time to another, what is economical may also vary. If wheat's price goes sky high it is no longer a good ECANES choice. I would substitute a less expensive grain in its place. If the price of honey comes down, I may use it once again. The important thing is to be flexible. One food may be substituted for another because it is NUTRIENTS that are essential, NOT any one particular food.

BUYING. It doesn't pay to try and get small amounts from wholesalers. We buy a lot and store it. People who don't store might consider going in with a number of friends in order to take advantage of wholesale prices.

Where I think the information is up to date and helpful I've included our sources in the text. When locating a new source we have found the yellow pages informative, also the chamber of commerce in one instance. Usually all that's necessary to buy wholesale is to say something like, "I'll take 100 pounds..."

STORAGE

We store large quantities of food for the following reasons: (1) Where we live is usually far away from any place to buy anything and we prefer to be able to stay out there, with as few trips into the S society as possible. (2) It's cheaper to buy in bulk. (3) Buying large amounts in advance [is a] hedge [against] inflation. (4) We want to be prepared as well as possible for such a contingency as nuclear war.

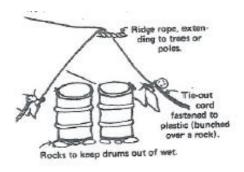
We now store most of our food in 15 gallon steel drums, bought from one of many cooperages (drum and barrel dealers) in the L.A. area. (I suggest checking the yellow pages and phoning to find out what's in stock.)

The drums we got were used but clean. A few were damaged – with holes and bent rims – so check carefully. We still gave them a soap and water washing and lined most of them with plastic bags. Even if there is no surface contaminant, the bags serve as added protection against water and ants.

Sources for plastic bags:

Bradley's Plastic Bag Co., 9130 Firestone Blvd., Downey, CA 90241, sells 24" by 45" (15 gallon drum liner) polyethylene bags for 37¢ each or \$26.50/100. Better Container Mfg. Co., 543 Granville Ave., Hillside (Chicago) IL 60162 sells the same bag but only 3 mils thick instead of 4 mils for \$19.69/100. These bags are heavier and more durable than garbage bags sold in supermarkets, but we used garbage bags before we learned of the above sources.

The drum lid and rubber gasket is held on to the drum by a circular band that tightens with a nut and bolt. This arrangement seals air-tight usually, but not always. As further protection against moisture entering the drums, we now place them under mini "A" shape polyethylene tents or simply a piece of poly directly on top. (Editor's note: See article on plastic tents in this issue.)



I've read that bay leaves inside the drums will repel ants. I put some bay leaves in and time will tell if they are effective.

In addition to water and ants, bears are a threat. We've seen square and round, metal five-gallon friction-top cans torn as if they were aluminum foil. So far our 15 gallon drums have proven to be bear proof.

Perhaps more insidious than bears is oxygen. Food is supposed to store better in an inert atmosphere. We've used carbon dioxide to create one and also kill any vermin and most fungi.

The procedure is quite simple if one has a CO₂ source. In the past we've used dry ice, buying it in the city and taking it to the woods (wrapped in foam, blankets and sleeping bags) where we did our packing.

First we placed a plastic liner bag in a 15 gallon drum. Into the bottom of the bag we placed crushed dry ice, one ounce per gallon of volume (1/3) would be sufficient to displace the air but we use more in hopes of flushing

out the oxygen more thoroly). We wrap the crushed dry ice in paper towel or rag before placing it in the bag so that the food we next pour in won't touch it and perhaps be damaged by the intense cold.

Next we put in the food: grains, kelp, alfalfa, etc. In some drums we mixed foods by first packing them separately in their own porous bags (so that CO₂ would penetrate). Raisins were left in their packing boxes, dividing some by cutting the boxes in half, and closing with plastic.

With unspoilables such as dextrose and limestone flour, we skipped the dry ice.

When the drums are full we loosely tie the plastic liner bags closed and set the lids loosely in place. In the next few hours the dry ice volatilizes and the bottom of the drums are no longer cold to the touch. Now the liner bags and lids are tightly sealed. (Pressure will develop if the drums are sealed before the dry ice volatilizes.)

Some recommend carbon tetrachloride as a fumigant. Rayo has read that it destroys vitamin E. It is very poisonous. We felt CO2 is a safer alternative. (I don't believe the carbon tet accomplishes oxygen displacement.)

When we bought the 15 gallon drums they came with various packing materials inside, including some one and two pound bags of desiccant, made by Filtrol Corp. of L.A. We used these desiccant bags in some of our food drums, after reactivating them by drying in the oven. How advantageous they are I really don't know. They seemed to dry out the raisins and currants, which have kept well for over a year, so far. Perhaps the desiccant's drying effect enhanced the fruit's keeping qualities. Since polyethylene slowly passes moisture, the desiccant was effective both within the poly bags and outside of them (within the drum).

I haven't mentioned storing flour because we don't. We consider it highly perishable and therefore grind it ourselves immediately before use.

We try to keep our food stores in as cool as possible a place through the year: in the shade, buried under ground, or watered by a cold stream. Sprouting is one simple test of quality. If something sprouted at one time but subsequently loses the ability, something has changed: I would think for the worse.

We've had popcorn pop well after two years storage. (No experience with any stored longer). We've stored unshelled walnuts a year with no apparent deterioration. Ditto for raisins and currants. Shelled sunflower seeds appeared to deteriorate in less than a year's time and we don't plan to buy them again. (Some seeds seem okay but others developed off colors and tastes.)

We've stored brown rice a year with no detectable change. Batchelor (GATEWAY TO SURVIVAL IS STORAGE) says that if brown rice is stored for "excessive periods of time" rancidity is likely. This is contrary to what some advocates of macrobiotics claim, about brown rice keeping indefinitely. I doubt if any food keeps indefinitely in good condition.

White rice, because it has the oil removed I presume, is more stable than brown rice according to Batchelor.

We've stored some powdered milk two years. Tasted okay, but unfortunately, harmfully deteriorated food are not always identifiable by one's senses.

To transport our stores, we do long hauls by truck, and short ones can pack frame, on our backs. The Camp Trails "Freighter" model has so far held up to repeated heavy loads — up to about 120 pounds, the weight of a 15 gallon drum full of food. We added a head strap to it to help handle the heavy loads.

A less-expensive surplus Air Force riveted aluminum frame has served well with equally heavy loads. It was made more comfortable with the addition of a home-made padded waist-belt, shoulder straps and head strap. The main drawback of this frame is that its shelf is only a few inches deep – sufficient for a drum but not so handy for a bag.

We number the 14 gallon drums with an indelible black MiracleInk felt marker.

The 15 gallon drums are not practical for storage of food on hand, in our living quarters. So in the kitchen we generally use one gallon containers, mostly plastic bleach jugs, some plastic wide-mouth mayonnaise-type jars and some glass jars.

We are leary [leery] of toxins in plastic but think the jugs probably do not contaminate the contents when used for dry storage. If weight and breakage are no problem I recommend glass, but kept in the dark so that light cannot deteriorate the contents. We will use wide-mouth jars for all dry foods when we get enough. Now we reserve them for raisins, walnuts and beans, and use narrow mouth bleach jugs we salvage from laundermats [laundromats] and dumps for wheat, popcorn, corn, rice, lentils, and millet. We fill them using a funnel.

Goodies that we have in limited quantity, such as walnuts, sesame seeds and raisins, we divide between us, each getting *er* own jar. That way if one of us eats fast it doesn't penalize the other, and we don't tend to race.

The plastic jugs aren't mouse and rat proof. So we put them in metal drums if we go away from camp for several days.

NUTRITION

FOOD COMBINING. Certain food combinations may lead to digestive distress. E.G. mixing a protein food such as beans, with a sugar such at [as] table sugar, tends to result in flatulence – baked beans are a notorious example. Similarly, Rayo and I find nuts and dried fruit, eaten together in quantity, to be troublesome.

At one time I tried to go by the food combining rules set down by Shelton (FOOD COMBINING MADE EASY and ORTHORDROPHY, Vol. 2) and Munro (MAN ALIVE YOU'RE HALF DEAD) and others, not because I had poor digestion but because the rationale for the rules seemed to make sense.

Since I couldn't usually tell any different in how I felt whether I followed the rules or not, and since I've read some contrary opinions, I'm back to going more or less by what tastes good, so long as it doesn't cause any noticeable problems. If I experience an upset [stomach], I refer to the rules, and try to avoid the offending combination in the future.

PROTEIN. Proteins are made up of amino acids, about ten of which are "essential" to humans, viz the human body cannot make them itself

from simpler substances. It must get these ten or so amino acids ready made in the foods eaten.

Most all unrefined foods contain some amino acids. ALL the essential amino acids are present in a great number of foods: rice, wheat, corn, lentils, walnuts, cabbage, potatoes, carrots, etc., as well as milk, meat and eggs. However the proportions of amino acids are considered to be better in some foods than in others (by some people).

Sometimes the misleading term "complete protein" is applied to such foods as milk, meat and eggs, when in actuality wheat and rice also contain all the essential amino acids, tho perhaps in less optimum proportions.

Some suggest that foods with less than optimum proportions of amino acids be combined in a complementary fashion with one another to come up with a better balanced protein. Thus, according to DIET FOR A SMALL PLANET, one part beans and six parts wheat flour provide a better (more fully utilizable) protein than either one eaten alone. However, other sources suggest yet different ratios for beans and wheat as being optimum. (The discrepancy lies in what is thought to be the optimum proportions of amino acids. I've seen recommendations in three different books that all contradict each other, and even themselves.)

In practice we often mix grains and pulses, e.g. wheat and beans, corn and beans, rice and lentils. But we don't try to achieve exact ratios, just going by taste and cost. In the future, if we get more definitive information on protein mixing we may try to do it more consistently and precisely.

I think the ECANES diet that Rayo and I follow provides sufficient protein, even without milk and occasional small game. But without the inclusion of the latter I think it certainly does (based on the one gram protein per kg. of body weight recommendations of the National Research Council, which some even consider unnecessarily high).

For several years I was a strict vegetarian. But from what I know at the present time I believe it is safest to include some animal foods in the diet. Price, in NUTRITION AND PHYSICAL DEGENERATION, reported finding no "single group of primitive racial stock which was building and maintaining excellent bodies by living entirely on plant food."

CALORIES. Obtaining sufficient calories is no problem with the ECANES diet. However this is not to say that it is a fattening diet.

If one ingests more calories than one expends, those extra calories will cause one to get fat, whether they come from bread, butter or lean meat. Eat too much of a reducing diet and the consequences will be the opposite of reducing! However on a nutritious diet one may have less of a tendency to overeat than if one eats junk.

A sugared cup of coffee and white flour pastry often prove fattening because they provide calories without furnishing enough of the nutrients the body needs, leaving one with "hidden hunger." In eating to satisfy "hidden hunger" additional calories are consumed and therefore a surfeit is created. (Anyways, that's how some nutritionists explain it. Sounds plausible to me.)

Starch has acquired a bad name among battlers of the bulge. The ECANES diet is high on starch. However, it is not refined starch. Along with the ECANES starch comes other nutrients and sufficient bulk and roughage to make it possible to eat a satisfying amount without getting an excess of calories.

From personal experience I know I can either gain or lose weight on the ECANES diet. Controlling my weight has been a problem for many, many years. If anything it has been easier for me on our present ECANES plan: I've been able to maintain a lower weight, for a greater percentage of the time than in the past on previous diets (including low-carbohydrate ones). How much of my success is attributable to food (vs. psychological factors), I don't know. Rayo has no problem with his weight.

For those who are weight conscious, like I, the ECANES way does offer additional advantages over conventional food practices. The number of shopping trips into the seductive society, with its professional tempters, is reduced. I find bakeries, candy stores and restaurants that are out of sight, smell and reach, are on their way to being out of mind. The ECANES diet allows one to live where there isn't adverteasing bombarding one from all sides.

Lastly, the sprouts provided in the ECANES diet offer one a relatively low calorie nibbler for treating attacks of the munchies.

OIL. Certain fatty acids are considered essential, i.e. the human body cannot synthesize them from other digested foods but must ingest them already made.

We presently depend on seeds and nuts to supply our essential fatty acids. Until recently we sometimes bought supermarket vegetable oil, margarine and butter. But not I try to stay away from processed oils because I question their healthfulness.

If I could get/make first-day-fresh hydraulically pressed sesame or olive oil and use it immediately I might eat it that way. All other oils are subjected to heat, as high as 475°F during processing. At temperatures above 450°F all oils develop acrolein, which is a highly irritating and perhaps carcinogenic substance.

Some health food stores (such as Organic Merchants) sell crude (unrefined) oils. (See THE OIL STORY.) These are supposedly less subject to rancidity than refined oils. However, I think that oil by any process is highly perishable.

Refined oils, which are most of the oils sold in stores, are generally solvent extracted. The solvents are commonly light petroleum fractions – suspect in producing cancer (Lee Foundation reprint #8).

Oils that are refined are often (perhaps almost always) rancid to begin with. Dr. Royal Lee knows of no commercial manufacturer of peanut oil who uses other than "moldy, spoiled peanuts that cannot be sold for any other purpose..." (Lee Reprint #8). Adelle Davis (LET'S GET WELL) claims that the rancidity cannot be reversed, only masked. The processors do a good job of that, using methods and substances which may be unhealthy.

Cottonseed oil is particularly bad because in addition to the above, it is subject to heavy pesticide contamination; cotton being grown as a non-food crop.

Margarine, in addition to the drawbacks of refined oils, is hydrogenated and therefore not as good a source of essential fatty acids.

Animals tend to store and concentrate DDT in their fat. We've never bought lard. We no longer buy commercial meat. The wild meat we've

gotten so far has had little noticeable fat on it. (I'm not sure what I'd do with a bear's fat.)

If I had a cow, goat or elephant I might drink it's milk. I'd probably even make butter and cheese occasionally. However the pasteurized, salted butter on the market, possibly containing bleach or coloring, is often made from spoiled cream. Furthermore the cream comes from cows that are probably fed stale food (such as hay, especially in the winter) which is likely to be contaminated with insecticide residues. With such foods and crowded conditions the cows tend to be sickly and therefore dosed with antibiotics. They and their surrounds are also sprayed with pesticides and disinfectants.

Not using oils our dishwashing is minimal.

NATURALNESS. Quite naturally, naturalness and wholeness are not naturally wholesome for humans.

Because something is natural it is not necessarily good for one's health and longevity. Rattlesnakes, Amanita phalloides mushrooms and tornadoes, all very natural, can cause injury and even death.

I used to believe that whole wheat bread (commercial) was better than white bread because it was natural. But commercial whole wheat bread, may, in fact, be more harmful than its white counterpart, because it is more subject to deterioration due to its higher oil content – the oil germ having been retained, unlike white flour which has it removed. Because of its possibility the whole wheat bread is also more likely to have preservatives, which may be harmful not because they are synthetic but because they may be toxic.

I think it is best not to get carried away with the idea that wholeness, per se, is any better than naturalness, per se. Can you imagine eating a whole UNshelled walnut? Especially if the TREE were attached! Even monkeys don't eat banana peels and whole unthreshed grains might cause problems – unless you happen to be ruminant.

However to get the most nutrients from my food, and thus get the most food value per dollar, I try to eat as much of a food as is palatable and nutritious, and in as fresh a state as possible. I've found watermelon seeds, for example, to be edible and tasty. I chew up the whole seeds and swallow. Cantaloupe seeds, on the other hand, seem to fragment into sharp pieces upon mastication so I spit them out after chewing. I eat the biflavinoid-rich white rind of citrus fruits; I peel and discard the outermost covering because of sprays and fallout. I eat the seeds from green peppers. Sometimes I dry some on a plate in the warmest part of the shelter, and use for future seasoning. I eat the seeds of apples, citrus and prunes IF organically grown; plants sprayed with arsenic may contain it in their seeds.

I urge caution with any untried foods. People are individuals, biochemically as well as in other ways. What is nutritious for one may be toxic for another.

FATTY RUBISH is the term used by Robert S. Ford, in his book STALE FOOD VS FRESH FOOD, to refer to the durable, non-food material which results from the deterioration of foods. If the food has first been ground, cooked, exposed to air, sunlight or microbes the deterioration is heightened. Since the no-food material cannot be utilized by cells of the body it builds up on the form of arteriosclerotic deposits.

Considering the food and quantity usually eaten, Ford cites commercial flour products as the big killers. The flour particles are so small that they can actually enter the blood stream very easily. If the flour were coarser, Ford says most of it would be eliminated with little harm. Judging from Ford's book, coarse flour, ground immediately before using, from viable seeds, would be much less harmful than the flour of commerce. Or, perhaps, better still would be sprouted seeds, eaten whole or made into dough.

Preserved meats are next on Ford's list of harmful foods. Also to be avoided are: powdered eggs, milk and anything containing them such as ice cream, mayonnaise and candy; most commercial oils, margarines and shortenings; nuts that are other than fresh from the shell; chocolate; drugs and vitamins; sun-dried fruits such as raisins.

Foods recommended are FRESH: vegetables, fruits, nuts, raw milk and butter, meat, etc.; eaten raw or cooked very little (except for meat) and eaten immediately after cooking.

To a large degree we follow Ford's recommendations, which coincide closely with the recommendations of many other heterodox schools of nutrition and health. We make certain compromises in order to be able to eat out of sight, viz in vonu. Hence we eat some dried fruit, vitamins and powdered milk.

PREPARATION

NOT COOKING. We seldom cook fruit, preferring it raw, for better taste (without the need for sugar) and better nutrition, as well as easier preparation and clean up.

We usually eat vegetables raw too but sometimes like them cooked. If I do cook them I try to serve some of the same vegetable raw, along with the cooked, for nutrition's sake and to cultivate a taste for the raw vegetable.

I'm really not sure how harmful conservative cooking is. Some claim it's an aid to digestion. I've read that only 1% of the carotene is [in] raw carrots is absorbed, while 5 to 19% of it is absorbed from cooking carrots (LET'S EAT RIGHT TO KEEP FIT). But, on the other hand, many nutrients are destroyed by cooking and toxic substances may even be created (as when oils are heated above their flash point). Enzymes, which can aid digestion, are destroyed at temperatures as low as 118°F. Some vitamins are destroyed by heat. With most foods I think that more is lost by cooking than is gained. So I try to do minimal cooking and cook minimally.

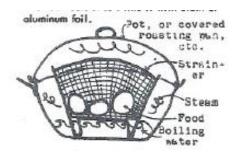
I also try to do minimal mixing, mincing and mashing of foods. Contact with metal and exposure to air destroys a surprising amount of nutrients. If I cut up some fruit or vegetables for a salad, I try to leave some big pieces and eat them with any fingers – sections of orange, a big piece of carrot, lettuce leaves. Often I don't make a salad at all and we eat the food whole – an apple, orange, banana, cucumber, sprouts and wild greens. I have a grater but I use it sparingly.

STEAM COOKING avoids high temperatures and any browned, crusted or burnt material (fatty rubbish). (Steam, or vapor cooking is not pressure cooking, where a special pot with tightly-secured lid allows high temperatures to develop.)

What is needed for steam cooking is a means to hold the food over the boiling water in a covered pot. (A domed lid may encourage condensation

to go down the sides and drip into the food.) From materials on hand I've improvised two methods.

(1) A strainer holds the food. Mine tends to discolor what contacts it so I line it with cloth or aluminum foil.



(2) The food may be placed on a platform, such as the cut-off top of a coffee can with holes punched in it.



If condensation drips are a problem, or if the foods are ones that will drip their own valuable juice, it's a good idea to place something (a plate, bowl, foil dish or absorbant [absorbent] food such as corn meal) under them to catch the drippings, which may then be eaten.

Vegetables cooked this way are detectable. So are tamales and other corn meal products. Wheat balls are nice too. Some meats taste rather bland after steaming. One can get used to the taste or lightly brown the meat after it's steamed. I haven't done much bread cooking this way – yet.

I serve cooked vegetables while they are still crisp and brightly colored, not mushy and dull. For leafy vegetables I often bring the water in the steaming pot to a boil, put in the vegetables, turn off the flame, and let the residual heat do the cooking. In ten minutes or so the food is tender and succulent and ready to serve.

SCALDING. Pour boiling water over the food, cover, and let stand. I like to do it with corn meal, ground fine, with a little sesame meal and a few raisins added. It's ready after only 5 to 10 minutes.

INSULATED COOKING. For things that require longer cooking, the food may first be cooked over a flame for a few minutes, then removed and insulated for the remainder of cooking time. E.g. I cooked rice for about 15 minutes over the burner, then in bedding I bundled the covered pot – under sleeping bag, blankets, foam, etc.

After a few hours I unwrapped the rice and found it still hot, with all the water absorbed, the grains individual and tender. However, the taste was much like that of raw rice, which tho not bad, is different from cooked rice, which I prefer for the most part. I'll either get used to the different taste or increase the flame cooking time in proportion to the insulated, flameless cooking time.

TSUBAKING. Baking without an oven – no sticking without fat. Tsu stand for Top (of) Stove Uncovered. I find it a lot easier to say "tsubaking" than "baking in an uncovered pan on top of the stove." I don't claim to have invented the activity of tsubaking. Bannock must have been cooked this way before I was conceived. The same holds for tortillas, chapatis, some cookies and probably numerous other things that I don't even know about.

I've found that covering such things as bread, while they're baking, causes them to taste more like cereal than bread, hence the uncovered part of tsubaking.

Since I no longer use bottled oil, or any regular shortening, in order to keep things from sticking I use flogree (which stands for FLOur GREase) – a layer of flour, usually from wheat or corn, on the bottom of the pan. The moister the food the thicker the layer of flogree: cornbread takes a thicker layer than wheat bread; pancakes take a thicker layer than cornbread, the second side taking less than the first, moister side.

GRINDING. Grinding isn't a grind – it's good exercise!

For my custom milling oper[ation?] I have 36 grinders. Number one star of them all is the "Estrella". It is made by Talleras Industriales, Apdo No 31, Monterrey, N.L. Mexico. I got mine at the Mercado El Centro on 200 something Calle Ruiz in Ensenada. It cost only \$5 U.S. Later in a hardware store I saw another grinder of similar design, but selling for \$6. I guess they're common in Mexico.

The molino Estrella looks almost identical to the Corona, tho perhaps with a rougher finish and lacking the shield over the grinding plates. However I find neither inconveniencing since I don't much care what it looks like and because I use a plastic bag to catch flour (and save me from breathing it). The bag is held on with a big rubber band which stays on the grinder. I find no bag necessary for moist things – they just fall into a bowl.

The Estrella excels at grinding moist/oily foods. After one grinding: sprouted wheat comes out ready to knead into bread; raisins and dates like carmel [caramel] (or jam if a little water is mixed in after grinding); sunflower and sesame seeds like meal (or paste, if water is mixed in afterwards; or butter, if ground about five times). Nothing has gummed it up so far. I've even ground cooked liver with it.

Usually, I grind dry grains and pulses, each one separately, two times. I tighten the adjustment screw the second time thru. This does NOT yield super fine flour like Pillsberry's Best XXXX. Some of it is fine and some is still somewhat coarse. If I want a uniformly fine flour I sift out the coarse pieces with a strainer, regrind them, sift again and repeat the process as many times as necessary. But I seldom do that. We've become accustomed to the coarser textures. They're very sensual! (Lewd food?)

Often a few kernels of wheat still have their husks on. I grind them, husks and all. A FEW husks don't seem to bother our guts. Sometimes wheat from the bottom of the jar includes some cracked pieces; I sift before grinding to get rid of them (fatty rubbish).

For unhulled buckwheat I grind once and then sift to separate the hulls from the flour. It doesn't seem possible to get groats (WHOLE hulled seeds) from the grinder – only flour.

With unhulled sunflower seeds we haven't found any way to separate either whole kernels OR flour from the hulls, using a grinder. Unfortunately Euell Gibbons hull flotation separation method (STALKING THE WILD ASPARAGUS) hasn't worked for us. Any hints, Euell?

After grinding dry things (e.g. wheat, corn) I don't wash the grinder. I loosen the adjustment screw, tilt, grind, blow and brush (with an old toothbrush) to get rid of the residue. I put the grinder into a bag and put it away. (Or if there's room to keep it up permanently I try to mount it tilted

to begin with (easy if mounted on a bench) and cover with a bag after blowing and brushing.)

After grinding some sesame or sunflower seeds (once) I grind corn or wheat to clean out the residue from the oilier seeds. But if I make seed butter (multiple grindings) I wash the grinder, as I do after grinding dried fruit or sprouted seeds. I seldom grind anything that involves washing the grinder, since I find it a nuisance.

Usually I grind only as much as I will use immediately. I.e., like the Hunzas I grind one day at a time. I do not store flour.

When grinding grains and pulses I adjust the grinding plates loosely for the first grinding and tighten up for the second pass thru, but not so tight that metal grinds metal. Having the adjustment very tight for the first grinding just makes cranking very difficult and does not result in flour as fine as if ground twice. I grind oily seeds and dried fruit once, starting loose and tightening up just enough to do the job. I find that forcing myself to grind with few rests helps me to build strength and encurance [endurance].

I've only used a Corona for a few minutes and I've only looked at a Quaker City mill, so I don't feel qualified to compare them with the Estrella. But I assume they all perform similarly.

Altho for myself I consider super fine flour unnecessary and possibly unhealthy (according to Ford's findings) if you want it there is a "stone Corona" (I think it's actually a synthetic stone). I saw one at the Whole Earth Access Co., 2466 Shattuck, Berkeley, CA 94704 for about \$30.

I've no experience with R&R Hardware, 175 West Main, Tremonton, Utah 84377, but they advertise the Corona Stone Mill for \$34.95 post paid. They sell the regular Corona for \$14.95 post paid.

My Number Two grinder is the oldest of my four metal grinders. It has survived perilous journeys and even a flood! After the rust was removed it was almost as good as new.

It turns out quite a fine flour from wheat, corn, rice and other grains with only one grinding (perhaps even finer than twice-ground Estrella flour) but the crank is harder to turn and more revolutions are required. Furthermore it gets completely gummed up with moist or oily things. (That

was the case before the flood as well as after.) This Deseret grinder sells for about \$12 fob Deseret Supply Co., 410 N. 5th St., Redlands, CA 92373 or Perma-Pac, 40 East 2430 South, Salt Lake City, Utah 84115. They also sell other mills, perhaps Coronas, and more expensive heavier duty models.

Number Three is a pepper mill that I picked up second hand for 15¢. Sometimes I use it to grind kelp flakes fine. But it gets gummed up fast and is not easy to clean. I've ground fennel and cumin seeds but they seem just as flavorful if left whole. I've read that black pepper is an irritant – I don't use it.

I've also used a Universal Food and Mat Chopper #2. I don't find it suitable for hard things like dry wheat but it will grind sprouted wheat and other soft things such as sunflower seeds and dried fruit. However I don't find that it does any better than the Estrella, and it seems to grind up metal, as evidenced by the color of the food that collects around the cutter.

My remaining 32 grinders are in my mouth, and with good nutrition that's where I plan to keep them for the rest of my life, without any new cavities. In OPEN DOOR TO HEALTH, dentist Fred Miller claims that patients who adopt the diet he recommends develop no new cavities. The diet is similar to Ford's but lighter on meat and includes home-ground bread.

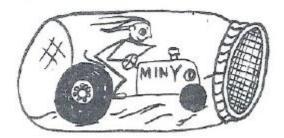
I hope you don't need any dental work, but if you do, you may be pleased to know that a gold crown that would cost \$100 in the U.S. costs \$20 in Mexico (in 1972). (That was at a private dentist: the clinic on 1520 Ave. Juarez in Ensenada advertises \$10!) The greatest savings seem to be on work that involves a lab — like caps and crowns. Regular silver fillings are about \$6; not spectacularly cheaper than in the States. Some of the dentists in Ensenada (including the clinic) don't even charge for an examination. One may get quotes from a few and then have the work done by the one that gives on the best all around vibes.

When buying any grinder one might do well to consider the following: Do all the parts go together properly? (Assemble it.) Is there a way to attach the grinder securely to the working surface temporarily? Permanently? Will the grinder work well without oiling? (If oiling is required will it contaminate the food?) Is the hopper big? The more it holds the fewer fillings are necessary. Does the hopper extension (if there is one) fit so that

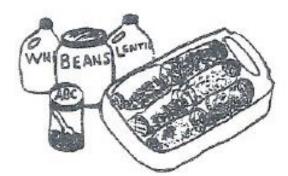
flour (on the second grinding) won't leak thru? (I must tape the crack where the Estrella's extension fits on.) Is grinding even? Viz the plates don't rub against themselves in places, grinding metal into the food. One may get an idea of this by turning the crank, with adjustment very loose, and looking at how the grinding plates mesh. However don't grind without food unless the adjustment is very loose and one is gingerly checking things out, otherwise the plates have no alternative but to grind themselves. Is disassembly for transport/washing/storage possible? Convenient?

SPROUTING

Mini-Farming a Glass Garden, or a Seed's Eye View of Sprouting



Here's what my sprout farm really looks like:



When I first started sprouting in our wheeled home I simply kept the jars on a kitchen counter. But the farm grew, and GREW, and GREW. So I cut some damaged plastic five-gallon water cans (they leaked at the seams) in half to make trays to hold all the sprout jars.

WHY DO I SPROUT? Sprouting increases the nutritional value of foods. As the dormant embryo (seed) begins to grow, vitamin and enzyme content soars. E.g., vitamin C appears, like magic, where there wasn't any before. Starches are converted to sugars, which are more easily digested. Taste is often given a boost too. Sprouting renders some seed more edible

and palatable in the raw state (e.g. wheat, peas, soy beans, mung beans), therefore eliminating the need to cook them. If they are cooked, sprouted grains and pulses require a fraction of the time required by the same foods unsprouted. On the other hand, in DIET FOR A SMALL PLANET I read the "net protein utilization decreases slightly when mung and soybeans are sprouted", so I try to prepare foods in a variety of ways.

ABC (Alfalfla, Buckwheat, and sub-Clover) sprouts furnish our main salad green, adding super fresh tasty variety and healthful nutrients to our otherwise heavily-staple diet of stored foods. And these salad greens are grown without pesticides and other poisons.

WHAT DO I SPROUT? From soup to nuts. If you visit my Happy Days Wide Mouth Sprout Farm you will find about eight jars (1 to 1 ½ quart) of ABC sprouts, two or three of wheat, one or two of pink beans, and a couple of lentils. That supplies the daily ingredients for Rayo's Breakfast of Vonuans, snacks, soups and dinner salad for us both with enough for company too.

I've tried sprouting just about every seed I've come across. Some don't germinate well. Others don't taste good or have sharp hulls which don't separate. Some are too expensive. At present I'm sprouting regularly the foods above.

N.B. Some seeds have been treated with virulent substances. There are even "systematic" poisons which actually become part of the growing plant. Whenever I buy seeds I make as sure as possible that what I'm getting is not treated.

In feed stores when I'm buying non-feed seeds, such as alfalfa, I tell the salesperson that I'm going to sprout and eat the stuff. In some instances they are sure the seed is treated, because it says so all over the packing material and they are even instructed to wear masks when handling it. In other instances I've been assured the seeds is not treated and that other people buy it to eat too. (It seems to be a popular folk-remedy tea for arthritis and rheumatism.) I try to check the packing tag myself, looking for information regarding any poisons, and at the same time I check the percentage germination, viz how many seeds out of a given number sprout. In addition I smell the seed for any strange odors. And I consider the price;

treated seeds are usually more expensive – somebody has to pay for the poison.

With feed grains like wheat and corn I feel a LITTLE safer. Stockmen can't feed their cows, pigs and race horses highly toxic seeds, at least not for long. But make sure the grain IS for feeding, not for seeding.

When buying feeds I pretend that I'm buying it for "my horses." Many people, including some salespeople in feed stores, think that food for humans must come from grocery stores. I don't try to reeducate them.

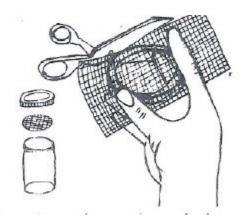
Even with feeds, I check labels carefully. All the dry milk I've seen in food stores is medicated. Say grits and linseed meal are boldly labeled "Hexane extracted."

HOW DO I SPROUT? I've tried several methods but my favorite, which I've used for a number of years, is the jar method. A wide-mouth canning jar (e.g. Mason, Ball, Kerr) is ideal, with its metal rim to hold on the screen and an opening large enough to get my hand in for washing and emptying. But they don't turn up very often where I shop — at the dump — so most of my sprout jars are serendipity; pickle jars, mayonnaise and peanut-butter jars, etc. I just affix the screening with a rubber band. Or I cut out the center of the lid with a punch-type can-opener or knife, round off the cut edge with a file so it isn't sharp, and use it just like the canning jar rims. I've even used cut-off bleach jugs (both quart and gallon) but I prefer not to use plastic: dirt is hard to clean off and frighteningly, some plastics have toxic substances in them. (I don't know if bleach jug plastic does or not.)

Fiberglass screen does not unravel. Nor does it rust. I had difficulty finding it but finally located some at a lumber yard/building supply store.

Plain old nylon stocking sufficed for a long time before I got the fiberglass and it could have kept sufficing. It's certainly cheap enough, if you know anybody who wears the things. Its main disadvantage is that water is slow pouring in and out. More times than not I'd have to tug on the nylon or put my mouth to it and blow before water would enter or empty. Or I use any material that will pass water while holding in the seeds, simply attached with a rubberband.

With fiberglass or other relatively stiff screening I cut a disc the same size as the outside diameter of the mouth of the jar. I've discovered this is easiest if I hold the screen over the rim, using the rim as a template. I angle the scissors toward the center of the disc so that the cut screen will fit the inside diameter of the rim.



To put the growth process into motion I place the seeds in a jar. I use about: one heaping tablespoon of alfalfa per quart jar; 1 ½ tablespoons of ABC per quart; 1 ½ cups wheat per quart; ½ cup lentils per quart; ¼ cup beans per pint. ABC consists of three parts alfalfa, one part buckwheat, one part subclover. The subclover sprouts are much like alfalfa but somewhat larger and tougher. Buckwheat sprouts are larger still.

With everything but wheat I next affix the screen top, pour in water, swish it around and pour it out. That's the washing. When pouring the wash water off alfalfa (or ABC) seeds I must be careful; if I pour vigorously some seeds escape.

With wheat that contains chafe, I leave the top off, add water until the jar is almost full, and stir. This brings the chafe to the top. Then I gently add more water until the jar is full. Into the full jar I immerse my hand and the chafe spills out with the displaced water. I repeat the stirring, filling, and displacing until all the chafe is gone. Or alternately I skim off the chafe with a spoon. (Some wheat we bought from a grain dealer recommended by Mormons was free of chafe, but what we get at feed stores usually has chafe, tho not a tremendous amount.) Next I affix the top and pour out the rest of the water.

After discarding the wash water I add the water that the seeds will soak in. Amount doesn't seem critical, tho a tremendous amount of water

might leach more from the seeds than a lesser quantity. With alfalfa I add maybe a cup of water. With wheat, enough to show a couple of inches above the wheat. Beans and lentils take more water because they imbibe greatly; water on top of them is at least equal to their own depth. In summer I use water of room temperature. In winter sometimes I heat the water to luke warm. Altho I haven't tried it, I've read that a drop of lemon juice in the water will hasten sprouting.

I let the seeds soak until they fully imbibed. In summer this takes less than 12 hours; in winter, longer — maybe 24 [hours]. (We don't always have heating.) Wheat and pulses seem to do okay down to somewhat below 40°F. ABC sprouts anywhere about 40°. At lower temperatures there seems to be some growth but rotting too.

After the seeds have imbibed I pour off the soak water. If the seeds are organically grown ones I use what comes from wheat for drinking and what comes from the others for cooking. I invert the jars and let them drain for a few minutes. Then I shake them and slap them on my hand to distribute the seeds. Some will cling to all surfaces of the jar. But I try not to get any on the screen, where I think they'd dry out too fast. I place the jars on their sides in one of my plastic trays, or just on a counter. One summer I kept them on the ground but at night I had to defend them against mice by covering them with metal screen.

While the sprouts are growing I water them two or three times a day, depending on temperature and humidity; once a day may be enough in cool, humid weather. I fill the jars with water, swish it around, pour it out, and set inverted jars to drain for a few minutes. Then back on their sides.

Since excess water stagnating in the bottom of the jar can cause souring, one may place the jars on an angle. However, allowing a few minutes for draining, I haven't found it necessary to angle the jars.

Some directions say to keep the sprouts in the dark for the first few days, simulating the conditions under the ground. Since I don't have a convenient place to do this, I don't. Doesn't seem to make any noticeable difference in the final product.

WHEN ARE SPROUTS READY TO EAT? Wheat is ready in perhaps a day if it's warm weather. I suggest tasting a sample every 12 hours in order

to determine the most palatable stage for you. I've read that the starch is converted to sugar in three to four days, but the info didn't say what kind of seeds. With wheat, if sprouted over a few days it develops a taste objectionable to most people, especially when raw.

Red, kidney, pinto and pink beans I sprout only 12 to 24 hours (in addition to soak time). If sprouted longer they don't seem as tasty. I also figure that in this short time any beans which aren't viable won't have a chance to decompose much.

Soybeans seem to be tastier if sprouted a number of days. Again, tasting at various stages will inform one of the most delectable harvast [harvest] time.

Lentils are very versatile. They are good from 12 hours beyond soak time on up to about a week when they are especially nice raw in spralads ["sprout salad(s)"] or momentarily steamed as a vegetable.

Alfalfa and ABC are also ready any time, but we usually let them reach maximum sprouting growth (after which they tend to spoil). Takes about a week, less in hot weather, longer in cold. If exposed to sunlight (even indirectly) during the last few days of sprouting, lots of chlorophyll will develop and the sprouts will be a robust green.

I've read that the amount of a certain vitamin contained in the sprouts is not necessarily directly proportional to the length of the growing time – a particular vitamin may be found in higher concentration on the second day than on the seventh! This is a good reason to vary harvest time.

I rinse the ABC sprouts in a big bowl of water before serving, in order to get rid of the loose hulls. (In extremely warm weather I try to get rid of the hulls as the sprouts are growing, since on accumulation of hulls may encourage souring.)

HOW DO I USE SPROUTS? Instant Breakfast of Vonuans. Rayo has this practically every morning: about five parts sprouted wheat and one part sprouted beans. He eats a few tablespoons of the wheat raw and cooks the rest, with the beans, using just enough water to keep things from scorching. He eats some after about 10 minutes cooking and the rest after about 15 minutes. (I usually don't eat until after noon.)

Sproucks [sprout snacks]. A handful of sprouts uncooked make a nice snack any time.

Spralads. They can be as varied as one's imagination, and stores permit. Rayo likes just plain ABC sprouts and cut up wheat grass (plus other raw vegetables if we have them, such as cabbage, carrots, parsley). But for myself I often like other things added such as wheat sprouts, lentil sprouts, garlic (fresh minced, or powder), raisins (dry or plumped with water), nuts (broken up pieces of walnuts), sunflower or sesame seeds (raw or toasted, whole or meal), and various seasonings such as kelp, oregano, paprika, thyme, cinnamon and allspice.

Sproup. I add different kinds of sprouts to whatever soup I may have made. I add ABC sprouts after the soup has finished cooking. I may add wheat and lentil sprouts sometime before cooking is completed. Beans I add near the start of cooking. Soup is just about anything (wheat/beans/corn/rice) cooked with a generous amount of water and usually some seasoning, such as kelp. Add sprouts and you have a sproup.

Sprandwiches. I just cut some slices of home-made bread and fill. ABC and mature lentil sprouts lend themselves well to sprandwiches because they are very tender and hold together well. Sprandwiches may also contain sesame paste or butter, raisins, nuts, cheese.

Miscellaneous. Bean sprouts may be used in dishes that call for beans. However, sprouted beans cook up in a fraction of the time it takes for unsprouted. Wheat sprouts may be added to casseroles, such as tamale pie. Their chewiness can give a meaty effect.

Storage of sprouts isn't an issue with us because we eat the sprouts as soon as they are harvested. But Catharyn, Elwood, in FEEL LIKE A MILLION, says sprouts will keep for eight days in a refrigerator if initially chilled at 35° for 18 to 24 hours; otherwise two to four days.

WHAT PROBLEMS HAVE I ENCOUNTERED? We depend a lot on sprouts to round out our diet and keep us healthy. I have had very few complications during all the years I've been sprouting.

Some people say chlorine and fluorine can inhibit or stop sprout growth. I usually use fresh mountain stream water but when I've used city water I've had no problems. I don't think it was fluoridated tho. A few times I have had sprouts sour and rot. I think it was because they had gotten too hot. I don't think it was due to any fungal infection since I purposely replanted in the same jars without sterilizing them: I merely rinsed them our [out] with room-temperature water. The second planting did not go bad, as had the first. "Too hot" was being exposed to direct sunlight for a few hours during hot summer days, or being constantly in a hot tent.

Between sproutings I merely wash the jars with plain water (luke if handy). I scrub the screens and rims with a toothbrush. I use soap and bleach only on newly acquired jars or ones that mice have been playing in.

Sometimes, especially in warm weather, souring results from an accumulation of water in the bottom of the jars. This can be avoided by insuring adequate drainage. Keep the jars inverted long enough after watering or keep them on a slant when on their sides.

I've found wheat sprouts will sometimes taste a little fermented after sprouting for a while. But with continued sprouting the fermented taste usually has disappeared. Or it disappears upon cooking. (I've read that all seeds ferment slightly to sprout.)

If one has problems it could be that one's seeds are not viable, in which case all the king's horses and all the king's men couldn't make that seed viable again!

But with good seed, good water, frequent wetting (err on the side of doing it too frequently), good drainage and good temperature, thou art God! Or Godess [Goddess]!! So go to it. Soak your seeds, sprout your soaks, and eat your sprouts. Do it now. If not now, when?



WHEAT

The authority on ECANES wheating is none other than the fabulous WHEATER EATER, World's Number One Wheat Feeder and Eater. So take over Wheater!

Thank you Haelan. Hi, all you eager wheaders. I hear there was some disappointment after my last interview when some people purchased their first 100 pounds of wheat kernels, only to find NO PRIZE in the bottom of the sack! Not even anything to send away for. Why, there wasn't even anything to read on the package — an unadorned, colorless piece of burlap. But don't despair, take wheat! my hearties. Here follows everything anybody always wanted to know about wheat, but I didn't know who to ask. Complete with brand names. So whead THIS when eating the next bowl of Wheat Troasties — with Crack, Crinkle and Crunch! (The foregoing a paid advertisement by Greater North American Wheaters — GNAW. No discrimination against South Americans intended. It's just that they mostly prefer corn and are represented by SAC — South American Corners.

Wheater, please cut out the corn, stop feeling your oats and get back to wheat!

Haelan, you know GNAW doesn't oppose a little corn, or even whole oats. It's the overly processed, stale wheat products that W.E. shuns. I seldom use any wheat that lost the ability to sprout more than a few hours before I eat it. This means when I use flour I grind it myself from wheat that would germinate if I planted it (which I do also, as a matter of wheat, to get wheat grass). Then I eat the flour the same day it's ground. (Tho with bread I usually have some left for the next day.)

THE WHEAT I BUY. In GATEWAY TO SURVIVAL IS STORAGE, Batchelor recommends that the wheat one stores to be above 11.5% protein and less than 10% moisture. In THE MOLDS AND MAN, p. 134, Christensen says, "If grain or seeds of any kind contains, when it is stored, enough water to maintain a relative humidity of 75 percent in the air spaces between the seeds, fungi will grow on and in the seed. The seed has to have a water content low enough so that the relative humidity of the air in the bulk is below 70% for long-time storage, preferably below 60%." There is sometimes an analysis on a tag attached to the 100 pound sacks of wheat.

According to COMPOSITION OF FOODS, hard red spring wheat has the highest protein content, next comes durum, then hard red winter, then soft red winter, and last white. However, Adelle (LET'S EAT RIGHT TO KEEP FIT) points out that wheat's protein content can vary from 3 to 22%, depending on the humus content of the soil.

Most of my wheat has been whatever hard red wheat I could get at a feed store. In Siskiyou the feed stores I know of don't carry hard red wheat. (One time I bought 100 pounds of the soft white wheat they do stock – about 8% protein. It was good tasting, tho blander than the hard red wheat which I prefer both for taste and higher protein content.) In the L.A. area I've been able to get hard red wheat, at \$4.50 per hundred pounds in '72, from O.H. Kruse Grain and Milling, 1459 Santa Anita, South El Monte. When hunting for a source of hard red wheat, one might do well to call the Church of the Latter Day Saints (Mormons) for advice, since they advocate storing it.

Making a sprout test before purchasing a large quantity is a good idea. Ann Wigmore says nine out of ten kernels should sprout if it's good wheat.

Wheater Eater's Eating Directory (WEED): Except where noted, all recipes have been tested in GWAR TEK – Greater North American Wheaters Test Kitchen.

I've grouped the recipes according to advance preparation needed. (1) DRY KERNELS (no advance preparation), (2) SOAKED, (3) SPROUTED, (4) GRASS, (5) GROUND, (6) UNLEAVENED DOUGH, (7) LEAVENED DOUGH, (8) TEMPH.

DRY KERNELS. Raw kernels. Sometimes I eat a few kernels raw. Because some people have reported cracking their teeth I suggest chewing gingerly.

Wheat chicle. If raw wheat is chewed long enough, with attention given to retaining the solids in the mouth, while the dissolved starch is swallowed, a chewy wad of glutten [gluten] remains.

Boiled wheat. The whole, dry berries are washed. Then water is added to cover and the wheat is first boiled a few minutes, then simmered until done – about 50 minutes. The texture remains somewhat "rubbery" and

may take take getting used to. If the wheat is first soaked, or better still, sprouted, it's less rubbery and cooks much faster. A handful of whole dry berries also add on interesting textures to stews.

Troasted (or popped) – the mini wheat cracker within a kernel. I troast (toast-roast) the kernels by tsubaking them until tender. Some kernels pop! tho they don't expand as much as popcorn. Troasting takes only a few minutes: I try to brown the kernels as little as possible. In each batch I cook just enough to cover the bottom of the pan, shaking frequently over medium heat. If troasting a large quantity I use a second pan set in simmering water for preheating. (See procedure under popcorn.) Troasted wheat may be eaten as is (chrunchy) [crunchy], or with milk and sugar (taste clearly resembles prepared breakfast cereals – call it Wheat Troasties, with Crack, Crinkle and Crunch), or further cooked in water (chewy). Troasted wheat, whole or ground, may also be used as a nut-like topping on such things as yogurt and ice cream. Rice may also be troasted, as may regular dried corn and other grains.

SOAKED WHEAT. Wheat kernels are washed and then soaked in water for 12 hours or until maximally imbibed (viz plumped with water). I initially cover the kernels with an excess of water (water on top of the wheat about one-third the depth of the wheat) so they stay submerged as they imbibe.

Raw soaked wheat – may be eaten as is.

Boiled soaked wheat. I often cook with the soak water. Or I may use fresh water if I fear the wheat contained water-soluble pesticides. Bring to a boil. Then simmer about 30 minutes, longer if a softer texture is desired.

Raw foods contain more of some nutrients than cooked ones. However I have read (NUTRITION HANDBOOK?) "...it has been shown that cooking with water increases the digestibility and improves the nutrition value of wheat protein, possibly by altering the protein structure. As a result methionine and other amino acids are liberated more rapidly, providing a better over-all pattern for absorption." So I eat wheat both ways. Raw, I prefer it sprouted a day or two.

Steweat. Wheater's stew for two. I soak ½ cup corn, ½ cup wheat, 1/8 cup rice, ¼ cup beans, ¼ cup lentils (and a few of some or all of those

ingredients ground, if I want a thick stew, but then I must stir to avoid scorching), plus maybe ¼ teaspoon wild carrot seed. After 12 hours (or longer if the weather is cold – not a factor if your quarters are heated, but sometimes mine aren't) I add a bay leaf and bring to a boil. Then I simmer for about one hour. I may add some fresh vegetables or sprouts toward the end. After turning off the heat I sometimes add herbs such as oregano, thyme, sweet basil, paprika, garlic powder, kelp and perhaps some chopped wheat grass. (Rice and any ground ingredients needn't soak as long as the whole wheat, corn, beans and lentils.) Before eating the stew I use some of the liquid separately for taking my limestone ration, in the form of a tasty soup: about ½ cup liquid plus a few teaspoons limestone flour, nutritional yeast, and some sesame seeds/paste, or a couple of walnuts.

Soaked-wheat bread. If one's only grinder is a Universal-type food chopper, one may find soaking (and/or sprouting) makes the wheat easier to grind. Paul Doerr (PIONEER newsletter, p. 269) makes a bread from wheat soaked one to two days. He adds salt, yeast, honey and grinds twice. Lets rise and bakes. Water or flour may be added if necessary to get the desired consistency – I prefer that of putty. Such dough holds together, does not stick to bowl or hands, and cracks only slightly when folded.

"Rejuvelac" is what Ann Wigmore calls water after wheat has soaked in it about 12 hours. I often have a cupful with one tablespoon molassas [molasses]. (I'd drink more if my wheat were organically grown – known to be free of pesticides – or if I knew the water doesn't leach any pesticides.)

SPROUTED WHEAT. Sprawties. I eat uncooked wheat sprouts as a breakfast, lunch, snack, appetizer or mixed in spralads or fruit salads.

Fermented sprouts. Cover sprouts (or unsprouted wheat) with lukewarm water (nothing hot enough to kill the seeds) and keep in a warm spot (around 70° would probably be ideal) for a day or until they taste fermented (sour). I read of someone doing this regularly in plates, using various grains, and fruit juice instead of water. Ford is down on sour food; Bulgarians seem up on it; I'm in between. I like sour bread but otherwise I usually don't sour wheat.

Wheat cheese. This is a white mold formed on wheat sprouts that are covered with water and set in a warm place for a few days. It is part of Dr. Jamison's restorative diet for cancer patients. I haven't tried it yet.

Troasted sprouts. Some as for dry kernels.

Instant Breakfast of Vonuans — wheat with a lively beat. This is sprouted wheat, in combination with a sprouted pulse such as beans, lentils, peas. Sprouting is what makes it "instant." Add enough water to wheat and pulse to prevent burning (about an inch in the bottom of the pan suffices, since what isn't covered with water gets steamed). In covered pan bring to a boil and simmer for 10 to 15 minutes. For "regular" Breakfast of Vonuans use soaked wheat and pulse, and double cooking time.

Sprouted-wheat bread. I think the most delicious bread, and probably the most nutritious too, is made from slightly sprouted wheat. Sprouting may also get rid of some dirt, thru soaking and rinsings, that is not removed from dry ground wheat. The reason I don't make it more is because I must wash the mill after grinding sprouted wheat, and attend to an exceptionally large quantity of extra sprouts.

I soak the wheat 12 hours, drain, and let it sprout for 24 hours (or longer if it's cold). In his SPROUT HANDBOOK, A. Stuart Wheelwright cautions not to sprout longer than 24 hours because the sprouts develop many enzymes, which can digest yeast and therefore inhibit the dough's rising. I don't usually use yeast but I still keep the sprouting time short because that seems to give the best tasting loaf. (If the wheat sprouts too long the bread remains very moist, even tho cooked long.)

For sprouting the larger quantity necessary for bread, one may use a tray, pan, or anything with a lot of flat surface area. Spread the soaked, drained wheat out (Wheelwright recommends a 1 to 1 ½ inch depth), cover with damp cloth, kept moist by periodic sprinklings with water. If the wheat is more than one layer thick it should be stirred occasionally so that it remains evenly moistened.

I've used a Universal Food Chopper but prefer an Estrella grinder. (See section on grinding.) After grinding I proceed as for unsprouted dough (section further on). It's not usually necessary to add any water to the sprouted dough. In fact, if it is too moist it may be desirable to add some flour. One may mix in sour dough starter or yeast. Since contact with metal reportedly harms yeast, it may be best to add it after grinding.

As with unsprouted dough, sprouted dough may be made into chapatis, pancakes, pie crust, etc., as well as bread.

WHEAT GRASS. If soaked or sprouted wheat is placed one layer thick on some moist earth, on the ground or in a container (I use a cut down one gallon bleach jug with holes in the bottom, placed inside a cut down 1 ½ gallon bleach jug) it will grow into wheat grass. Cover the seeds with paper or cloth which is kept moist, or a thin layer of dirt. When the grass pushes up the paper or cloth cover, remove it and water directly. When about 6 inches high I harvest it with a scissors. I cut it up into spralads, sproups, candy or chew it plain or with a little kelp. (If I'm chewing a lot, after thoroly masticating I spit out the pulp which remains.)

GROUND WHEAT may be used in largely the same ways a plain and soaked wheat, and requires less cooking time. However, when boiled, ground wheat becomes sticky, unlike whole kernels, and leaves the pot hard to clean, especially if it scorches, which it has a tendency to do if not constantly stirred. (The finer the grind, the stickier.)

Raweal. Sometimes I eat whole wheat flour straight from the grinder. (No, it's not like white flour.) Dr. Shelton (ORTHOTROPHY, Vol. 2) claims cereals are most readily digested when eaten dry because starch is not water soluble and wetness inhibits secretion of sufficient saliva. But one may wish to add water, milk or cream, hot or cold.

Raweal Plus (Swiss Muesli or Familia). Such things as almonds, walnuts, sunflower seeds, sesame seeds, wheat sprouts, raisins, figs, and berries are added. Water or milk may be added to soften.

Cerweal and Cerweal Plus. Like Raweal but "scalded" or otherwise cooked as desired. Cerweal is rather bland after cooking.

Cerwealt (Toasted Cerweal or "Wheat Cream") tastes more like the commercial cereals of this type. The cracked wheat or flour is toasted by tsubaking on medium to low heat, stirring often, until evenly lightly browned. It is then cooked in a pot with twice or more its own volume of water: bring to boil, simmer, stir often. The toasted wheat may be mixed with untoasted wheat (about 2 ½ to 1) before adding water for what I think is a sweeter Cerwealt. Rice, corn and other grains may also be prepared this way.

Crunchy Cerwealt is Wheater's answer to that Other Brand. W.E. tries harder and tastes better! Crunchy Cerwealt is guaranteed to contain less fatty rubbish than any other brand, since it is: ground fresh! Immediately before eating; contains no refined oil; contains no hexane extracted grits; sugar is optional. Perhaps this sample recipe will be helpful: Grains, ground as fine as desired (to avoid grittiness) and lightly toasted – one or a variety, e.g., 1 part wheat, 1 part corn, ½ part millet, ½ part rice. 1 part troasted wheat. A little kelp. 1 part sesame meal. 1 part sunflower meal. A handful of raisins. A few walnuts, broken up. Fresh berries if available. Molasses, honey, sugar to suit. (One part carob powder may also be added, but technically, it's not usually ground fresh at home, and therefore GNAW TEK does not endorse it as an official ingredient of genuine Crunchy Cerwealt.) Mix it all up, add your favorite thing that this recipe leaves out (nut/seed butters, toasted whole sunflower seeds, powdered milk, apricots, peaches, etc.) and there you are. Remember, with Crunchy Cerwealt* Taste Tells. (*The ONLY crunchy cereal certified by GNAW TEK. Beware of fatty rubbish if a substitute is accepted.)

Couscous. ("koos' koos – a N. African dish made with crushed grain, usually steamed..." Webster's. I put cracked unmoistened wheat in a squarish piece of cloth, gathered together at the top and fastened with a clothes pin. I steamed it for over an hour and it still wasn't very soft. But I was impatient so I went ahead and ate it. It will still sort of crunchy but had a very nice distinctive flavor. For the fuel conscious, cooking time may be reduced to about 40 minutes if the wheat is thoroly moistened with water prior to steaming. No doubt the end product is somewhat different tho.

Sauces. In a pot I mix flour with cold water. (If the water is hot initially, lumps will form.) Very little flour is needed in relation to water, otherwise the result is too thick. So I start with only a few teaspoon-fulls flour per cup water. It thickens as it cooks. Flour or water may be added to achieve the desired consistency. I start off with rather high heat but turn it down to low-low as the water boils. I stir almost constantly and cook it maybe 10 to 15 minutes; longer if I want to thicken it without having to grind and add more flour. The basic sauce/dressing/dip is bland, especially if untoasted wheat is used. So after I turn off the heat I may add such seasonings as strike my fancy: kelp, garlic (fresh grated or dry powder), rosemary, oregano, sweet basil, paprika, cayenne pepper (if a hot sauce is

wanted), etc. To make a mushroom sauce I add mushrooms while the sauce is cooking. Sesame meal adds to the sauce's richness.

Cofwee. Happily I don't crave coffee, or a substitute. But this is one. Toast coarse ground wheat on burner or in oven until very darkly browned. Boil about ½ teaspoonful per cup of water until desired strength is obtained. Strain and drink. At least it doesn't have caffein[e]. Other grains may be prepared in the same manner. They all taste similar to coffee, perhaps because like coffee they're all charred, which isn't much to recommend any of them.

Gluten. This is what's used in some imitation meat products. It's high in protein but lacks a well balanced amino acid pattern (DIET FOR A SMALL PLANET, p. 83). I placed a ball of dough in a nylon stocking and submerged it in water overnight. Then I kneaded it (thru the stocking) in a stream. After I got tired kneading I left it in the stream, returning in a few hours to knead some more. The starch washed away and I was left with the gluten and bran in the stocking. I washed away as much of the bran as possible. I made patties, breaded them in flour and fried them a little in oil. They were chewy and tasty (probably due to the frying – it's pretty bland stuff otherwise) but it was a lot of work for vanishingly little gluten. And why throw away the starch and bran? So I haven't repeated this experiment (after Ann Liston, THE WHOLE EARTH CATALOG, July 70).

UNLEAVENED DOUGH. Here's what dough and batters bake down two: 2 basic kinds – unleavened and leavened; 2 basic leavening agents – yeast (including sour dough starters) and chemicals (including baking soda/powder) – I don't use the latter category); 2 basic cooking methods – dry heat (including oven, tsubaking, campfire, and sun baking) and wet heat (including boiling and steaming); 2 basic thicknesses – thick and thin; 2 basic consistencies – thick and thin; 2 basic textures – soft and crisp; 2 basic ingredients – flour and water. Variations on the basics are as infinite as imagination. Here from GNAW TEK are some basic recipes and some elaborated ones. I hope they satisfy your appetites and stimulate your own imagination as well.

GNAW TEK considers its dough the best in the world, but there's no patent on it: even in the distant Himalayas the healthy Hunzas make it. Anyone else may also. The secret, which seems lost over most of the globe,

is this flour from viable seeds, used immediately after grinding, eaten immediately or soon after baking. In one word, real FRESHNESS.

Sincereloaf. I grind about 6 cups of wheat for a medium size loaf (8 to 10 cups for a larger loaf), once thru a Deseret type grinder or twice thru an Estrella. I'm not sure just how coarse the wheat can be and still sick together to form dough. I have made dough from wheat ground only once thru the Estrella: it had to soak an hour or more before it would stick together when I kneaded it, but after that I used it in the same way as dough made from finer ground wheat. The resultant loaf had an extra coarse texture but was tender and good.

After grinding I flogree [flour grease] my 8 inch fry pan with enough flour so that the bottom of the pan doesn't show.

Except for a couple of cup-ful[l]s I put the rest of the flour into a LARGE bowl. (My 15 inch diameter plastic basin – from the dump of course – works sp[l]endidly, but I've also used a mere 1 gallon bleach just with the top cut off.)

I add kelp flakes to the flour and mix $-\frac{1}{2}$ tablespoon per cup of wheat (my measurements refer to the wheat before it's ground).

Warm water is added next, a little at a time, very cautiously, since it's easy to add too much. Total water will eventually be about ¼ to 1/3 the amount of wheat used, depending partly on the fineness of the flour, humidity, and time kneaded.

I mix with my hands. First I clean my nails and wash my hands so they're as hygienic as any other utensil. You may stir with a spoon at first but I defy you to knead with one!

After all the flour in the bowl is moistened I add those two cups I had saved out at the beginning. They are my "insurance" in case I added too much water. But I mix them in now even if I didn't get goof on water.

I may have to add a little more water at this point but I do it only by the spoonful. A lot of mixing and squeezing gives the correct consistency to the dough without too much water being added. If the dough continues to stick to my hands I know I've added too much water. With the right amount of water the dough doesn't stick. (But if it does I can always grind more flour.)

If you've never made dough before, I suggest you get your hand(s) into it and now worry about the water business. You'll get the feel of it in no time.

At this point I've mixed the flour and water enough so that I have a lump of dough. I let it stand 5 to 15 minutes (more if the flour is very coarse) while things soften up. (If the dough is allowed to stand a long time – say an hour or more in a warm place, it may sour. Which is no catastrophe unless you don't like sour dough, in which case make sure the place where you set the dough is not above 50 to 60 degrees.

If the dough is somewhat sticky when set aside to soften, it's okay. As the dough stands, and later gets kneaded, it soaks up some excess moisture, and may even require a few additional teaspoonfuls of water.

After softening time it's kneading time. If I want a cake-like texture (sort of tender and crumbly) I knead minimally (maybe 3 minutes or less). If I want a more bread-like texture (chewy and holding together better) I knead about 10 minutes or more.

I enjoy kneading exercise. I do it in the big basin. I smash the dough down with my fists (how aggressive!) and then fold it up. Then I push down with my palms, fold it again and repeat. I may take a rest half-way thru.

I add water if necessary, viz if the dough is extremely stiff and cracks when folded (versus being softer – more easily worked – and bending when folded). But if the flour was pretty coarse, the dough may never get real soft; it continues to crack a little when folded.

The dryer the loaf the less tendency it has to stick to the pan. However, a certain amount of water is necessary if bread is to bake and not just be toasted wheat. So I suggest you make loafs dry and some moister and see which you like best. (The moister the loaf the more flogree needed.)

Sufficiently kneaded dough is sometimes described as being of earlobe consistency. Some directions say to knead until the dough is no longer sticky. Problem is, it's like trying to describe how a banana tastes to someone who's never even seen one; or how blackberries smell or what it feels like to swim nude for the first time or hold a purring kitten against one's nakedness. You just have to experience them. Then you know, and your life is that much richer. So if you would know bread dough, make some. Do it now. What are you waiting for?

After kneading I shape the dough into a ball, then squish it down and make it into a big thick pancake. (Sometimes I shape it by pushing it into a pie pan.) Then I put it into the flogreed pan. I flatten it out some more if it needs it, so that it has the same diameter as the smallest diameter of the pan, and the bread will fit okay even after it's turned over (the sides of the bread mustn't slant out like the sides of the pan).

Now I may score the bread into sections with a metal spoon handle, making vertical incisions which don't quite sever the various pieces. This makes the bread easy to break into pieces after baking.

If there's time I now put the bread aside. Cathryn E. says that bran is water repellant and should stand for at least three hours. I don't always wait three hours. Sometimes I don't wait at all. But often I grind and mix in the morning, and bake and eat in the evening. (Remember the caution about souring.)

I tsubake 35 to 40 minutes on a side. (A ten cup loaf takes 45 to 50 minutes on a side or longer if one desires a drier loaf.) When turning the loaf I stand it up on end and brush excess flogree back into the pan. I just use my hands. (Use a pot holder if you find it too hot.) I don't cover the baking bread because doing so results in a more cereal than bread-like taste.

For a soft crust I bake at medium-low heat all along – the lower the heat the softer the crust, to a point. For a crisp, hard crust I use a higher heat for the first five to ten minutes on each side.

After baking the flogree may be used for Cerwealt. However it is usually excessively browned, and therefore in Ford's fatty rubbish category. I reserve it for use as a dry shampoo or add it to the compost heap.

Sincereloaf is delicious right after baking but for slicing it holds together better than thoroly cooled. It also becomes less moist.

To experience Sincereloaf you'll probably have to make it yourself. I think you'll like it, more and more each time. After all, it's sincere. It's not made of air. Not light, not white – when you take a bite, you get a flavorful hunk, not a bunch of bunk!

Multi-grain and seed doughs. When I make sincere-loaf I often use a mixture of wheat and corn. (See corn section.) I like the taste and feel the variety may improve my diet. Rice, millet, beans, lentils, sesame and sunflower seeds, and buckwheat may be ground into flour, made into dough and baked as bread. Some wheat flour may be necessary for binding some non-glutenous [glutinous] flours together, but most flours can usually be molded and baked into bread, even tho it may be crumbly. I suggest experimenting.

Garlic bread. Sometimes I add grated fresh or powdered garlic to Sincereloaf. If I have butter I may melt it, add garlic to it, let it stand for a while, then put it on the bread.

That doughy kid stuff. From pieces of basic unleavened dough (BUD) the kids at GNAW TEK made all the different shapes they could think of and we baked them in the oven in flogreed pans. The shapes were smaller than bread loaves and therefore took less cooking time. (Tsu-baking may be used instead of oven baking, of course.) The children thoroly enjoyed themselves (especially Wheater).

Bread sticks. Of course. Just roll out lengths of BUD and bake.

Toughies (dumpling, matzo balls). From minimally kneaded BUD that stood for about ½ hour after it was mixed, I broke off small pieces and rolled balls between the palms of my hands. I cooked the balls for about ½ hour in a simmering soup. Spices such as garlic, paprika and Italian seasoning, in addition to kelp, will make the Toughies more flavorful.

Wheat balls. I find these more tender than Toughies. They are made the same way except steamed instead of boiled.

Dozers (dough circles). Add a new shape to your life: let the Dozer do it. These are somewhat like bagels. I make them from thoroly kneaded BUD. I rolled out lengths of dough between my hands, and on a board bent them into circles, lapping and pressing the ends together. I made them regular bagel/donut size. Then I boiled them in plain water for 30 minutes

after which I broiled them for 10 minutes on each side (tho I don't see why tsubaking couldn't substitute for broiling). I sliced (to end up with two circles) and ate. They weren't much different from bread but the shape was fun.

Chapatis. They are like tortillas except made with wheat instead of corn, and common to India instead of Mexico. They are the daily bread of the Hunzas. I make them from basic unleavened dough (BUD), or BUD with a little bean flour and spices added. Kneading time doesn't appear critical – the more kneading the chewier the chapatti. After the BUD has stood about ½ hour, I break off golf-ball-size pieces and roll between my palms to form balls. These I place between two plastic bags and roll flat and thin with a jar, which is my substitute for a rolling pin. I roll from the center out. The circles are usually somewhat irregular; I don't take pains to make them perfectly round.

When I first starting making chapatis I used flogree under and on top of the dough to prevent sticking to the plastic. But recently I've found that if the dough is dry enough and if I don't roll too thin and if I peel the plastic off carefully, back against itself, I need no flogree.



I peel the top plastic off first, then I drape the chapatti over one palm, bottom plastic now facing up. I gingerly peel it off and slap or slide chapati into a hot pan. No oil. Sticking is usually not a problem but if it is flogree may be used on the pan. After two minutes the chapati has dried some and no longer sticks. I turn it with my fingers (or a spatula) and cook two minutes on the second side. Longer cooking makes the chapati crisp — more like a "tostada." I keep the done chapatis warm between two pie plates (top one inverted while I'm cooking more).

Chapatis may be eaten like tortillas or bread: plain or buttered; filled and folded into a taco or rolled into an enchilada; or sandwiched; made into a pizza; etc.

Crackers. Make a mini-bread and you have a cracker. One may use BUD: break off small pieces and make like chapatis, only smaller, thick or thin. The longer the tsubaking the crisper.

Instead of rolling one may place the dough between plastic and flatten with the bottom of a jar. Or one may shape BUD into a log, chill (the outdoor works fine in winter) and then cut slices with a knife and tsubake.

Some possible variations are adding sunflower/sesame seed meal or butter, or whole seeds, mixed into the dough, or the seeds may be pressed into the cracker as it is rolled out. Different spices may be used: one may check the ingredients in one's favorite store bought cracker and duplicate.

Cookies. Sweeten a cracker and you have a cookie. For sweetening, one part sugar (or carob, or ground dry fruit); for added sweetening and richness, one part powdered milk (but the milk is optional); and 4 to 8 parts wheat, measured before grinding as usual. The more wheat the less sweet the cookie. (Of course honey may be used for sweetening but I haven't been using it lately because of price and I don't recall the proper proportions. As I recall it has a tendency to burn so use it sparingly and keep the heat low.) One may add such spices as allspice, cinnamon, ginger and grated vanilla bean, as well as kelp; ½ tablespoon per cup or two of wheat. Ascorbic acid (vitamin C) will give a lemony flavor.

Sandwich cookies may be created with carob fudge, raisin carmel [caramel], seed butter, etc. as fillings. Powdered milk, sugar and a pinch of ascorbic acid make a citrusy icing.

Carob n' Molassas [Molasses] Cookies. Mix together in a large bowl: ½ cup sesame seeds (ground once); ¼ cup corn (ground twice); 1 ¼ cups wheat (ground twice); 1 cup untoasted carob powder; 2 ½ teaspoons cinnamon; ½ teaspoon allspice; 1 to 2 inches grated vanilla bean; some kelp (I use it instead of salt). (If you don't have the spices, no sweat – just don't use any.) Add ½ cup molassas [molasses] (I just black-strap) and ½ cup water. Mix with magic mixing manus, i.e. your hand. Add more water if necessary to form a smooth, soft dough. Let rest about ½ hour and roll out like little chapatis, or press with a jar, or form into a log, chill (like ice box cookies) and cut into slices. Tsubake. The carob and molassas [molasses] make this cookie very sweet and chocolatey.

Seed butter cookies – very rich. Cream together until smooth (viz use the back of a spoon to sort of press the ingredients against the side of the bowl as you mix): one part sunflower (or sesame, peanut, or other) seeds, ground into meal; one tablespoon molassas [molasses] for each cup

sunflower seeds; 1/3 part carob powder (raw/toasted); 1/6 cup powdered milk; and a little water to moisten. In a separate bowl mix together one part wheat, ground, and cinnamon, allspice and kelp – about one teaspoon for each cup of wheat. Add one-half of the flour mixture to the creamed mixture and mix. Add the rest, mix. Add water as necessary to form a stiff dough. Proceed as for Carob n' Molassas [Molasses] cookies.

Pie crust. For a meat/vegetable pie, a cracker dough, rolled out like a giant chapati should do. Baking the crust before filling might make it crisper. I've only made sweet pies, not prebaking them and using cookie dough or just plain BUD with some shortening added – I use ground oily seeds such as sunflower or sesame.

Semis (semi-circles – like turnovers but tsubaked, not fried). I usually make semis instead of pies because they are smaller and may be eaten up fresh. Into chapati-like circles I roll out BUD (made rich with one part sunflower/sesame seed meal for each part wheat). I place filling on one half, fold over the other half and seal the edges with a fork.



For filling I use berries, seed paste or butter, ground dry fruit, or whatever else I think of.

I tsubake perhaps five minutes on a side. I haven't found sticking a problem but one may always use some flogree if it is. Uncooked these are also delicious.

LEAVENED DOUGHS. Baker's yeast or sour dough started may be added to BUD to make leavened bread. Don't expect the result to be like Blunder Bread. Because of the extra complications, and because I've learned to like unleavened textures, I make sour-dough and yeast bread only a few times a year as novelties. Like Thoreau, I found I could simplify.

The unabridged edition of Haelan's book contains a whole section of leavened pastries. Another source for sour-dough baking is [Bradford] Angier's HOW TO GO LIVE IN THE WOODS ON \$10 A WEEK. However he used baking soda; I omit it.

TEMPH, I learned, is a popular traditional Indonesian fermented food, sold in the markets in banana leaves by the people who make it. Commonly it is made with soybeans which have been inoculated with a fungus. But wheat may be substituted for soybeans. The unabridged edition of Haelan's book will include my temph tales including: "Wheater Goes to Bed with Rhizopus" – a very sexy story.

TELLING IT LIKE I SEE IT. I try to keep my eyes and mind wide open, as well as my mouth, when wheat is concerned. I do not claim that wheat is a perfect food. W.E. does not live on wheat alone. (Not even on wheat and love alone.)

Eaten in large quantities, or exclusively, ANY single food may have undesirable effects on the body. From what I know, the damage may result from small amounts of a toxin (insignificant if a food is only one of many foods eaten, but harmful if it constitutes most of the diet) or because that food may not supply all nutrients. Eating only lean meat, such as rabbit, will cause death. Eating only unsprouted wheat/beans/rice will also lead to death, since, for one thing, they don't supply vitamin C.

Some people may be allergic to whole wheat. If one thinks this might be one's problem, substitute another grain in its place, such as corn or rice, is a possibility.

Some argue that wheat is too acid[ic]. However, "It is characteristic of the burning of all food-stuffs that the end products are more or less acid. The body is well equipped to cope with this situation." (Nasset, YOUR DIET DIGESTION AND HEALTH). But even if acidity is a problem, I suspect wheat can be counter-balanced with limestone flour or with foods which have an alkaline ash such as kelp, millet, and most fresh fruits and vegetables.

Some point out that wheat (and other cereals, especially oats) contain phytic acid, which is bound so firmly with some of the grain's calcium that it is unavailable to the body. In addition, Bernard claims that wheat contains toxamin, a substance which interferes with calcium deposited in the bones. I think it is probably well for anyone eating wheat to be sure and get adequate calcium from other sources. I eat limestone flour, UNhulled sesame seeds, kelp, and blackstrap molasses – all exceptionally rich in calcium.

Another point against wheat, presented by Bernard, is that bran is a rasping and irritating roughage. Whole sprouted/boiled wheat, where the bran is whole and soft, is less apt to be a problem than ground wheat, where the bran is broken up and has many edges.

Ford claims that toxic substances in the bran are irritating. (He says the toxic substances ward off soil microbes. I just wonder if ALL seeds are so protected and therefore toxic to some extent.)

At times I've noticed irritation of my rectum when defecating, but this has only been when I've overeaten and whether the cause of discomfort was wheat or gluttony I'm not sure.

Ford reports that the groove in the wheat kernels contains dirt and microbes. Perhaps during sprouting some of this contamination is removed, by the soaking and repeated rinsings. (One reason not to drink the soak water.)

The possibility of crop failure and price increases of any grain is yet another reason to be conversant with many different ECANES possibilities.

On the plus side: Wheat has been inexpensive – half the price of rice. Wheat stores better than any other grain I know of. Wheat sprouts well – valuable for nutrition, taste variety, and as a test of condition. Wheat contains more protein than rice or corn. Wheat is glutenous [glutinous] – holds together for things like chapatis.

I hear that kids who bring whole wheat sandwiches to school are still being made fun of. If Sincereloaf can't go to school with you without ridicule I'd say you're definitely in the wrong school. What are you going there for anyway?

It was a pleasure, Haelan. Feel free to call anytime. The cupboard of GNAW TEK are never locked.

OTHER GRAINS

For the sake of variety, taste and nutrients, we use corn, popcorn, rice, millet and buckwheat in addition to wheat.

CORN. Thanks to Jim, who, coming from Mexico, said, "Why don't you use corn?" I answered him by saying that when I had tried it in the past it had been tough and rather tasteless, and hard to grind. Some had been

weevily. But I was inspired to try it again, since here was an inexpensive, readily available item. And I'm glad I did.

I buy only whole-kernel feed corn, about \$4 per 80 pound sack in 1972. The feed stores also sell cracked corn and corn meal, but I buy the whole kernel corn because it has the best keeping qualities and has been deteriorated least from oxidation (tho there's often quite a few pieces in with the whole kernels which cause us concern).

Corn-wheat bread. I grind separately four cups of corn and three cups of wheat twice thru the Estrella (or once thru the Deseret). I mix together dry along with four tablespoons of kelp. Then I add hot water (causes more stick-togetherness than cold water), about 3 ½ cups. I mix-knead with my hands. The dough doesn't ever hold together like all wheat dough so I sort of mold it into an unflogreed pie pan, let stand a few hours and then transfer to a generously flogreed fry pan and tsubake about 45 minutes on each side.

I've also used other proportions, from pure corn to mostly wheat; also some with rice or milo. The greater the proportion of corn the longer it takes to cook and the crumblier it is.

Torpatillas. This is a cross between chapati and tortilla. With the corn I have, my experience has been that all corn "dough" just won't hold together for tortilla making. But with ½ corn and ½ wheat I was able to roll out torpatillas. I suggest one practice with all wheat chapatis first. Then try mixes with more wheat than corn.

Tamales. Bread is nice but one day I started dreaming about tamales. I even had saved some dried corn husks. Sure, why not? Out came the Estrella. Twice I ground the corn. I soaked the corn husks in hot water. I added kelp to the corn meal and about ¾ as much water as corn (when unground). I mixed with my trusty wooden spoon. I shingled the corn husks to form mats and spooned on some moistened corn meal. I patted it out flat into a rectangle about ¾ inch thick. In the center I placed the filling of precooked beans, lentils, wheat, and mushrooms, seasoned with kelp, garlic, oregano, paprika, a bay leaf, and cumin. (Those who like it hot may use cayenne.) The filling needn't be completely cooked since it will cook further inside the tamales. After spooning on the filling I spooned on another portion of corn meal, patting it flattish with my hands. I added

more moistened corn meal here and there so what the filling was completely covered. Then I shingled on more corn husks to cover the whole thing. Rayo tied off the ends as I held them and the tamales were ready to cook. Into the steamer they went. After 30 minutes the half-hour of decision had arrived! Would they be like tamales? Would they be good whatever they were even if not tamales? They smelled like tamales. Off came the husks. They looked like tamales. Oh, I was excited. They felt like tamales. And lo! They tasted like tamales! Wow! Our own tamales. I no longer was dependent on frozen T.V. dinners for a Mexican food treat.

Since my supply of corn husks is long gone I have found that pieces of white cloth (e.g. old sheet) can be used instead. (I'd be leary [leery] of colored fabrics because of possibly toxic dyes.) And it isn't necessary to tie off the ends – I just fold them under. I've also found that the taste of the tamales may be varied by adding garlic, oregano, Italian seasoning, and paprika, as well as kelp to the corn meal (before adding water).

When I don't want to bother making individual tamales I make tamale layer cake. Into my strainer-steamer (lined with cloth) I alternate layers of moistened, seasoned corn meal with layers of filling. Tamale cake, depending on thickness, takes longer to cook than individual tamales. I allow 40 minutes to an hour.

Pinole. Kephart's CAMPING AND WOODCRAFT suggested this. Whole kernel corn is troasted until lightly brown (may burst). Then grind.

I've also made corn cereals, corn balls and chowder, following basically the same recipes as for wheat.

POPCORN. We buy it at wholesale grocers of institutional foods, e.g. Northwest Grocery Co., Madison and W. 4th Ave., Eugene, Ore. Price was about \$11.50 per hundred pounds in 1972. ("Institutional" is the key word when checking yellow pages, since wholesale grocers who cater to markets sell in case lots of small packages.) Confectionary suppliers carry it too, as do outfits that sell only popcorn and accessories to theatres, etc.

Before buying a lot of popcorn I recommend testing it. Some popcorn we bought at a regular grocery at a good price had some off-taste kernels (old?). And some we bought from a food co-op (the dealer they bought it from sold it as pigeon feed) didn't pop as well or taste as good.

Popcorn is dandy. It's much better than candy. And there's no need to fry, if you give shaking a try. We don't use an oil in popping corn — and it tastes delicious. However the method is not fool proof and even we burn an occasional kernel, and when cooking on wood even an occasional pan.

Rayo, the champ popper, recommends a separate preheating pan for fastest and easiest popping. The bottom of the preheat pan should be the same size or slightly smaller than the bottom of the popping pan for ease of measuring out the batches. The preheat pan sets in a pot of water which is kept simmering (or use a double boiler if you have one).

We have found the best popping pot to be a common thin aluminum one; stainless steel seems to burn the corn more flame – some experimentation may be necessary to find the best adjustment of your burner.

Place the kernels in the preheat pot. After about ten minutes dump them into the already warmed popping pot. The kernels should be not more than one layer thick on the bottom of each pot. Then start a new batch warming in the preheating pot while the first batch is popping. Both pots should be covered.

The popping pot is shaken occasionally. Pretty soon, after two or three minutes, a few kernels will pop. (If none have popped after five minutes turn the flame up a little.) When the kernels start popping shake every few seconds, vigorously enough to keep any puffs from sticking to the pot bottom. If the heat is set correctly, it will soon sound as if there's a western movie in that pot. Then toward the end only a few kernels will pop, as if everybody killed off each other. Especially when first learning I say don't try to pop the very last popable kernel. This is a critical time for burning and better to have a few unpopped kernels than a few burnt ones.

Dump the popped kernels into a metal or glass container (they are hot enough to melt plastic) then put the second batch from the pre-heating pan.

I don't find it necessary to wash the popping pan between poppings unless I burn some, in which case I scour off all traces of the burnt corn since there seems to be a greater tendency to burn if there is charred residue on the pot bottom.

If one uses oil or melted butter I recommend dry popping and adding the oil afterwards, since heating oil to high temperatures deteriorates it, forming carcinogens. (The low heat needed to melt butter may not cause deterioration.)

I've come to enjoy popcorn plain, without butter or salt. Sometimes we make a meal of popcorn, eating a few quarts (popped) a piece. May there always be golden sunny days and may there always be popcorn and Rayo to celebrate them with. POP, POP, PURRAY!

RICE. As Wheater says, "A little rice is always nice." In terms of quantities we use, rice usually is second to wheat. It has the advantage over corn that it requires no soaking or grinding. In fact we prefer it not soaked or ground. It seems to fall apart when cooked if it has been soaked, and if ground it loses flavor. Rice also has a better balanced protein than corn.

We use brown rice because we feel it offers the highest nutritional value of any of the rices processed for eating, and we find it more flavorful than white rice. Brown rice has the tough, outer hull removed – I was told that it won't sprout for this reason. White rice has further layers of the grain removed. There's disagreement as to which stores better.

There is long grain and short grain rice. At one of the mills I was told that long grain is grown in some southern states and short grain in the Central Valley of Calif. In a blind-folded taste test I couldn't tell the difference. Short grain is less expensive here so that is what we buy. There is also glutinous, sweet brown rice, called Mochi Gome in Japanese. Its scientific name is ORYZA GLUTINOSA. I've tried small quantities and liked it.

We have compared samples of some organically grown brown rice (Chico-San) to other brown rice (Farmers Rice Co-op and Koda Bros.) and could tell no difference in taste, texture or appearance. Of course there might be differences in nutritive content and freedom from poisons which aren't detectable by tasting. But the non-organically grown presently sells for about half the price of the organically grown, so we have been buying the former.

Some brown rice we bought from Rice Growers Association in West Sacramento had a chalky appearance due to being hulled with abrasive

stone rollers which scuffs and ruptures the bran layer. RGA rice cooked faster and had a blander taste — more like white rice. I don't think it will store as well since the bran layer is no longer intact. Koda Bros. and FRC use rubber rollers. We have bought in quantity — 100 pounds or more from Koda Bros. and from Farmers Rice Co-op in South Dos Palos, and from FRC in West Sacramento. Price in 1972 was \$10 a hundred pounds. We ran into a case of bureaucratitis at FRC's West Sacramento mill. The other places were easy to do business with. They are usually open weekdays only and aren't mail-order. Organically-grown Chico-San rice can be purchased wholesale thru Spiral Foods, 1017 Willow St., Chico, CA 95926; \$20 per 100 pounds in 1972.

Plain boiled brown rice. (I will assume rubber-shelled rice. If stone-shelled (powdery-looking) rice is used, use half as much water and lessen cooking time.) I measure rice into cooking pot. I pour in plenty of water and stir. Keeping rice in the pot (by holding on the lid loosely, or using a piece of screening) I pour off this wash water. Now I measure in slightly less than two cups of water for each cup of rice. How much water one uses will vary with the type of utensil, heat source and personal taste. I stir or jiggle the pot so the rice lays flat, not piled up on one side.

I turn the burner on high and bring the water to a boil. After it boils I turn down the flame so that water and rice don't boil out but I let things boil rather vigorously for about five minutes. Then I turn the flame down and let the rice boil gently. I do not stir, it isn't necessary. The rice takes about an hour to cook. I cook until the water is almost all absorbed (none visible when the pot is tilted, then turn off the flame and let the pot set for 15 minutes.

At the table Rayo adds salt and sometimes raw sesame seeds or walnuts. Sometimes I add sesame or sunflower seeds — raw or toasted.

This cooking method is simplicity itself. I've found no way to improve upon it. Other recipes call for toasting the rice before boiling it. I've tried that and found it added work and only detracted from the taste.

Plain brown rice with lentils. I use three parts brown rice to one part lentils. I count the lentils like rice in determining how much water to use. I cook the same way as rice along. The rice and lentils seem to compliment [complement] each other in a most palate-pleasing manner, furnishing a

rich, highly-flavorful dish. One can vary the proportions of rice to lentils. I like to throw in a few garlic cloves and maybe some kelp.

Rice cream. This is like the commercial cereal of similar name. Rice grains are ground to desired fineness and then toasted in a pan. Or they are first troasted and then ground. The flour is cooked with water, the less water the thicker the cream.

MILLET. For a while we used some Camation Wild Bird Seed, bought at an Albers feed store. We ate it mostly ground and boiled (we didn't care for it whole). Eventually we decided the hulls were too sharp for our innards – evidenced by blood in our feces. We have not yet found an inexpensive source for hulled millet, which we like very much. (One feed store said they could get it for us but, with special shipping charges, the price was about \$16 per 100 pounds.) Min-Kota, around Fargo, N.D., sold organically-grown for \$20 per 100 in 1972 (including shipping if shipment totals over 300 pounds). My comments about rice preparation hold true for millet, tho more water is used, three or four to one (versus two to one).

BUCKWHEAT. It isn't wheat at all. It's a completely different genus: Fagopyrum esculentum. It's not even a grass. Buckwheat seeds are tetrahedral! We bought 25 pounds of some organically grown, sold especially for sprouting by Min-Kota (about 20¢ a pound in 1972). The little we have left I'm saving for sprouting but formerly I made flour out of some of it. After grinding I separated the hulls from the flour simply by sifting thru a strainer. I made some bread using solely buckwheat flour but we preferred a mixture with more wheat than buckwheat. Buckwheat pancakes are delicious.

MILO. We recently bought some at a feed store. It is inexpensive, about 5¢ a pound by the hundred pounds. Milo is a sorghum (according to the dictionary) and 11% protein; according to COMPOSITION OF FOODS. So far I've only had a chance to use it for a cereal and in corn bread (ground twice thru the Estrella). Seems good. They sprouted fairly completely tho slowly.

OATS, BARLEY, RYE. The usual forms sold in feed stores are not hulled. I haven't discovered a convenient way to hull. Groats (already hulled seeds) I've found for sale were expensive and wouldn't sprout – an ominous indication. We don't buy oatmeal – oats are high in oil and thus especially

susceptable [susceptible] to deterioration after rolling. If we find groats at a good price which sprout I imagine we'll use them.

PULSES

Pulses are the edible seeds of peas, beans, lentils, and similar plants having pods.

BEANS. At present we are using pink beans which we got for \$11 per 100 pounds in 1972 at a bean warehouse in West Sacramento. They sprout fairly well, cook up tender, and have a pleasant, mild flavor. In the past we've also used red, pinto and kidney beans. They all seemed to have similar sprouting and cooking characteristics, tho the pinks are a little smaller and milder tasting than the others.

We usually sprout our beans for a short time (only 12 to 24 hours, in addition to the soak time) to minimize any spoilage of those beans which won't sprout and also because they taste best if not sprouted longer. Or we at least soak them 12 to 24 hours (the colder the temperature the longer they take to imbibe).

We make bean flour by simply running the beans thru the Estrella a couple of times. This flour can be cooked alone in soup, sauces, patties or dressings, or added to grain flours in chapatis, gruel, bread.

Bean chapatis. Measured before grinding: 2 parts wheat to 2/3 parts beans. Or 1 part wheat, 1 part corn to 2/3 parts beans. Proceed as with regular chapatis (wheat section). I cook the bean chapatis a little longer than all-grain chapatis.

Bean paste. Plenty of water is mixed with the bean flour, plus desired seasonings – kelp, oregano, cumin, garlic and cayenne (with allspice optional) will give a chile [chili] powder flavor. The mixture is cooked gently with much stirring to prevent burning. Bean paste may be eaten as is, spread on chapatis, used as sprandwich filling, or shaped into bean burger patties and fired on flogree. Made thinner the paste becomes a sauce or dressing; thinner still and one has a smooth bean soup.

Boiled beans. Cook in barely enough water to cover until tender; about 15 minutes if sprouted, ½ hour if only soaked. Season to taste.

SOY BEANS. We bought some that didn't sprout well at all. Another time we got some that sprouted well. Those we cooked in a little water, after sprouting a few days. The ones that didn't sprout we usually soaked (changing the water every few hours) until plump and then boiled or baked spread on sheets of foil in a 300° oven. Baked this way the beans are somewhat nutty. (I think the ones sold in stores as a snack food are thus baked AND subsequently French fried in oil and salted.)

At one time we used soy grits (which we bought at a health food store, along with the beans that didn't sprout.) They are precooked. All we had to do was add boiling water and let stand and imbibe. Some time after using these soy grits I saw for sale at a feed store what I think was called "soy bean mili feed HEXANE EXTRACTED." I took home a sample and as far as I could tell it was the same asgrils. We no longer use the product since it is ground, precooked, and subject to contamination with the solvent.

LENTILS. We find lentils very tasty, with a rich, meaty flavor, especially if unsprouted – and with a nice, fresh vegetable quality when sprouted long. The ones we're using presently were purchased from a wholesale institutional grocer for \$4.25 per 25 pounds (17¢ a pound). Since they cost 50% more than pink beans we eat less lentils than beans. We'd like to find a cheaper source. We use them in basically the same ways as beans, except: lentils will cook up tender without looking; we often sprout lentils much longer than beans; I enjoy lentils raw in a spralad, after sprouting. Lentils may be ground into flour, just as beans.

Lentil soup. Put a cup of lentils and 1/8 cup of rice in a pot. Wash and drain. Add 6 cups of water. I may add some spices now: garlic powder, soy sauce, paprika, and a few whole garlic cloves. Lentil soup is also tasty unseasoned. I bring the water to a boil, then reduce to a simmer and cook until tender, adding water if necessary to thin (about ³/₄ hour cooking time). I turn off the heat, add a handful of kelp flakes, some Italian seasoning, and let stand a few minutes.

AUSTRIAN PEAS are inexpensive, about \$5 per hundred pounds. They sprout well and taste okay after sprouting and brief boiling. But a salesman at a feed store said that Austrian peas are sprayed with a defoliant before harvesting. I gather they are used as a cover crop, not directly for animal food. We've discontinued buying them.

SPLIT PEAS. We don't use them because they are split (and thus more easily oxidized) and because they don't sprout. We like to be able to sprout, both to get more nutrients and to test the condition of the seed.

N.B. There are occasionally small pebbles in pulses, regardless of where bought. I keep a lookout for them when I wash and sprout but I don't always find all of them. All I can say is watch out when eating. And make sure your teeth are strong, by getting plenty of calcium and other nutrients.

About gas: If one really wants some rip-roaring flatus, try beans and sweets, eaten together (most baked-bean recipes). We almost had our own private moon launching one summer after lunching on baked soybeans and fresh Juneberries. WOW! I experience little or no gas problems if I eat only a small quantity of beans at a time and don't combine them with sweets. Cooking the beans until tender seems to help too, as does sprouting them previous to cooking. Lentils seem less gas producing than beans, and, if sprouted long, not gas producing at all.

OILY SEEDS

ENGLISH WALNUTS. We have been using these as our principal nut the last two years because we like them and they have been the least expensive nut we have been able to purchase. We've bought them direct from growers (usually small, family operations), from a feed store, and at roadside stands. We've paid from 20 to 35 cents a pound; the lowest price was in Fresno. We've seen them from So. Cal. on up thru Oregon.

Walnuts are a good source of fat: in 100 grams of walnuts (after shelling) there are 64 grams of fat – almost two-thirds the weight. Walnuts also contain some protein, tho it's not optimumuly [optimally] balanced.

We keep our walnuts in the shells until right before eating. We always eat walnuts raw: alone; with raisins in spralads or fruit salads; as a topping for rice or rice-and-lentils. We sometimes eat walnuts with non-fat dry milk to supply oil and facilitate calcium absorption. Occasionally we make candy with walnuts. I usually eat about ten at a time.

BLACK WALNUTS. These grow wild, along many roadsides in Calif. We've gathered in small quantity. We pick them from the ground and let them dry, husks and all. They are too hard for any ordinary nut cracker: I use a hammer, a good heavy one. The more the nuts dry the easier they

seem to crack. In addition to the meats being delicious, I've made a dark brown husks, by cooking them in water, straining and saving the liquid. I've used it for artsy-craftsy projects.

SESAME SEEDS. As far as I know there are brown ones, black ones and white ones; the latter having been hulled. I've tried sprouting both brown and white ones – no sprouting occurred.

Strangely, the hulled seeds are usually cheaper than the unhulled ones! I don't know the reason for this. But we try to get only unhulled sesame seeds. They are a good calcium source, containing over ten times as much calcium as the hulled ones, in a ratio of two parts calcium to one part phosphorous. Unhulled sesame seeds also contain about as much iron as does liver.

The hulled seeds contain more phosphorus than the little calcium left in them, and are robbed of all their potassium, sodium and vitamin A as well as 75% of their iron.

We eat most of our sesame seeds whole and raw, either straight or sprinkled on rice. We also make sesame paste which we use like butter on bread. In addition I like sesame seeds toasted; Rayo doesn't.

Sesame meal. Raw or toasted seeds are ground once (I use on Estrella). The resultant meal may be used to add flavor or oil to candy, baked goods, cereals and milk drinks.

Sesame paste. I simply add a little water to the meal and mix with a spoon. I use as a spread.

Toasted sesame seeds. I use a frying pan on medium-low heat, covered to keep popping seeds from escaping. I suggest tasting as toasting proceeds.

Sesame dressing. Add more liquid to the past and it becomes a dressing. I like it on vegetable and fruit salads.

SUNFLOWER SEEDS. We are now eating the last few pounds of 125 pounds we bought a year ago, shelled. We don't plan to buy any more shelled ones to store because a substantial percentage noticeably deteriorated even tho they were stored at under $60^{\circ}F$, much of the time in a CO_2 atmosphere. Until we figure out an acceptable way to do our own

shelling we won't be eating any more. (Shelling with teeth or fingers is too time consuming.)

Toasted they taste somewhat like bacon to Rayo; like peanuts to me.

WILD PLANTS

I enjoy learning about, gathering and using wild plants. The berries we've gathered we've eaten ourselves. But I've gathered enough of some herbs to give away, trade and sell on a small scale as well as fill our own needs.

Learning to identify plants has been slow. Having a teacher to point them out, in their natural habitat, seems to be the fastest way to learn, but we've only been so fortunate on a couple of occasions.

I've learned some plants from books such as Kirk's, Sweets, and Gibbons', by reading descriptions of the plants that are supposed to occur in the type [of] area I'm in, studying the pictures, and then keeping my eyes open when in the field. If a plant I see looks familiar, I try to find it in the books. Or if I have a plant I want to identify I may thumb thru the books in hopes of finding a picture that fits – "picture keying."

I've also sent a few specimins [specimens] to university botany departments who identified them by return mail! — the names of the plants opposite line drawings of them which I had provided. I tried to include the flowers as well as the leaves, intact on the stems, enclosing three or four plants in a one ounce letter. I suggest choosing a college near by that has a botany department and giving them a try.

Most of my wild friends have some very distinctive characteristics – else I wouldn't have learned them, beginner that I am, so I think other neophyte botanists who are in the Pacific Northwest will find them easy to get acquainted with.

With a little exploration and a book such as Kirk's, I think one will soon know any edible berries in the area, at least those that occur in quantity; they're just too conspicuous to miss if one tries looking.

BLACKBERRIES (Rubus sp.) unfortunately seem to like the same areas that most people do – rich bottom lands in the larger river valleys.

They ripen from mid summer to mid fall. We've sometimes gathered them in great quantities when traveling, but not when camped in the wilds.

HUCKLEBERRIES (Vaccinium sp.), on the other hand, we've found in some profusion in the forest. Red huckleberries (Vaccinium parvifolium?) grow sparsely but widely in rather open woods and brushy areas; they are ripe during most of the summer. Evergreen huckleberries (Vaccinium ovatum) grow in more densely forested areas but bear profusely in openings. The berries are small and black to purple. They start ripening in summer and often remain on the bushes and tasty until mid winter. The shapes of huckleberries are similar to the shape of blueberries. Most of them are small and laborious to gather in large quantities; also not as sweet as many other berries. We have gathered only when we didn't have other fruits.

RASPBERRIES. We have found black raspberries in cut-over areas, sometimes in great quantity. They ripen mostly in July. Thimbleberry, another Rubus which resembles a red raspberry, grows along many creeks.

JUNE BERRIES (Amalanchiar sp.) resemble black huckleberries or blueberries in appearance but are larger and sweeter. Bushes growing near creeks bear most profusely. The berries are often infected with some kind of a blight. They ripen in late June and July.

SALAL (Gautheria sp.) is a common undergrowth in densely wooded areas but bears heaviest along logging trails and other openings. The berries are black to navy blue, hairy, and have a bell-like shape. The berries on some plants are very tasty – almost like maple sugar; on other plants they taste weedy.

MADRONE (Arbutus sp.) is a tree with smooth reddish bark and dark green evergreen oval leaves (distinctive looking). It bears pea-size orange fruit in late fall which fall to the ground. We've only eaten a few but they were pleasant tasting.

MANZANITA (Arctostaphylos sp.) also has smooth red bark but is a shrub with thick leaves and a driftwood-like shape to it. It is the most common shrub in many areas, especially in dry, rocky areas and bears profusely. Furthermore the berries are edible from late spring until mid autumn. At first the berries are green and red, like diminutive apples, and

taste somewhat like tart apples. We eat them right off the bushes. Once we ground some in the Estrella and got a nice sauce. As the berries mature the seeds become bigger and harder. We still eat the berries as snacks but spit out the seeds. By fall the berries have dried on the bushes, and are powdery inside and sweet, in a tart sort of way. The seeds, if ground and brewed as tea, give a beverage much like regular tea – rather astringent. We don't like it. The powder is what we use. We crush up the berries with our hands or put them in a bag (cloth holds up best but I've used paper and plastic), pad it with newspaper or whatever, and hammer the berries to break them up. The crushed/pounded berries are next sifted thru a regular strainer. We've eaten the powder plain and in fruit salads. More often I've made "monzaide" by mixing some powder in water and letting the solids settle to the bottom (takes about 15 minutes) and drinking the flavorful liquid – sweet enough not to need sugar.

ROSE HIPS. This is the fruit of the rose. Very rich in vitamin C. The hips are ripe in the fall – many stay on the bushes well into winter by which time they're mostly fermented – instant wine. The plants can be recognized by the bright orange-red fruit – and the thorns! We've seen many along country roads and a few in wild places, where the hips seem to be smaller. Once I made some jam, using honey. Some recommend cooking and straining them down into a liquid, supposedly rich in vitamin C. I tried that too. Tasted good. But I don't understand how the vitamin C can survive heat. Nor do I see how tea, made from dried hips can have much vitamin C, both because of the drying and the boiling water. It's a tasty drink, tho. Unfortunately, when the hips are ripe there isn't much sunny weather to dry them. I had some under shelter that molded before they dried.

ACORNS. So far we've just gathered a few, from various oaks (Quercus sp.) and tanbark oaks (Lithocarpus sp.). The only way we've found so-far to make them palatable is to shell, grind into flour, and boil for several hours! with many changes in water. Once we placed ground acorns, within a nylon stocking, in a stream for a day but considerable astringency remained. Next time I'll try leaching for several days, as Kirk suggests. After all the processing I wonder how much food value, other than calories, is left. But reportedly acorns were a staple Indian food.

BAY, Calif. Laurel, Oregon Myrtle (Umbellulaira californica). The plants I've seen are usually bushy, about 8 feet high, with rich green, shiny,

leathery leaves which have the characteristic bay smell, especially when crushed. If one crushes and smells any promising leaves I think one will have no trouble finding bay, if it grows in one's area (S.W. Ore. to So. Cal.) I pick the leaves any time of the year when they're not wet, and dehydrate them in any convenient dry place (removed from branches). Bay nuts are ripe in fall. They seem to retain their astringency even after cooking with repeated changes of water. (I'll have to try leaching them like acorns.) Bay wood has a beautiful close grain, and takes on a high polish. So far I've used it to make some buttons, using round slices from limbs of the desired size, that had been seasoned a year. (By the way, twenty Spice Island's bay leaves sell for \$1.06!)

BRACKEN FERN, Pteridium aquilinum (illustration below, left). I've found it in great quantity, usually by the side of logging roads, throughout the Siskiyou. In the summer the new fronds make their appearance and we use them as a nibbler. I pick not just "fiddle heads" (the newly sprouted shoots) but also the tops of older shoots, as long as they are tender. It takes some looking around to find the fiddle heads – I bend over and even crawl around.

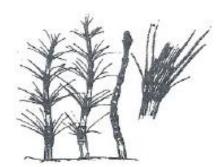


YARROW, Achillea sp. (illustration above, right). The flowers resemble wild carrot but the feather-like leaves of yarrow distinguish it. The flowers are white. I dry bundles of the whole plant (cut above the ground), upside down, in shady places. Flowers and leaves may be used for tea. Supposed to be good for what ails ya. One time I made some which was delicious but every other time it has been bitter. Crushed leaves may be applied to wounds to promote healing, and as a local anesthetic, especially for tooth ache. I've made I Ching sticks from the straights stalks (10 inches

long, 50 or more per bundle) and sold them. Yarrow seems to be common along many roadsides.

WILD CARROT, Daucus carota. The frilly white flower gives it one of its other names – Queen Anne's Lace. After flowering the flower head closes upward, becoming cup lake, hence the name Bird's Nest. The stems and leaves are covered with minute hairs. Poison hemlock (Conium maculatum), which closely resembles Daucus, does not have these hairs and that is the way to distinguish the one from the other. I gather the wild carrot's seeds in the summer along old country roads and bridle paths, rubbing them from the plants with my fingers, into a wide-mouth gallon jug strung around my neck. I use them for seasoning such dishes as stews and beans. I've sold them to health food stores. In STALKING THE HEALTHFUL HERBS, Gibbons has a whole chapter devoted to wild carrot.

FENNEL, anise, sweet fennel, Foeniculum vulgare. I haven't found it in the wild yet, only in vacant lots. It's the stuff that smells like anise, also like licorice. May be two to seven feet high, finely-divided thin grey-green leaves, small yellow flowers in umbels. I gathered the seeds, rubbing them with my hands into a plastic bag (I try to have a few in my pockets always). They may be steeped for tea or used as flavoring in baked goods or candy. The seeds may be ground in a pepper mill. Or the whole seeds may be steeped in hot water and the water used instead of the seeds. Kirk says the leaf stalks are edible raw or cooked. Haven't tried them yet. They are even listed in COMPOSITION OF FOODS – rich in vitamin A.



HORSETAIL, scouring rush, Equisetum sp. (illustration above). Looks like something out of prehistoric times. It's said to have flourished in the Paleozoic, when it grew much larger than in this age. It still appears to flourish, in moist soil in the forest, near creeks. Some of the plants resemble asparagus, while others look more like bottle brushes. They feel somewhat

like fine sandpaper from the high silica content. In fact I've used them (just wadded up) for scouring pots. Ebba Waerland, in REBUILDING HEALTH, recommends harvesting from June to Sept. and drying in the sun (unlike other medicinal herbs which are dried in the shade). I followed her directions. We now have plenty of dried horsetail for tea. It's somewhat like tea-tea in color and taste – maybe better. Ebba says it's a strong diuretic, and excellent for rheumatism, kidney and bladder ailments, and for soaking festering sores. Kirk and Sweet also give information about this plant.

MULLEIN, Verbascum sp. May be recognized by its majestic yellow flowered spike, or when it's not in bloom, by the thick velvety leaves. (one of it's names is campers' toilet paper.) Common along highways but I've also found it in the forest on cut-over land, along with raspberries. I've dried the leaves and steeped them for tea. The taste was not anything special. Some use it in smoking mixtures.

NETTLES, urtica sp. Touch them and you'll know it! We pick them with rubber gloves or some other protection against the stinging oil that the hypodermic needled-like hairs inject. Grows in moist places. We found some in So. Cal. mountains but none in Siskiyou so far. Cooking destroys the stinging property. We eat as a green vegetable.

CONIFER NEEDLES, including pine, spruces, douglas-fir, incense-cedar, arborvitae, fir, hemlock. We nibble on them when we're hiking. Angier (HOW TO STAY ALIVE IN THE WOODS) says spruce tea is as potent in vitamin C as orange juice! and that the vitamin may be gotten more directly by chewing the tender new needles.

SOURGRASS, Redwood Sorrel, Oxalis oregana. Looks somewhat like a three-leaf clover. The taste is pleasantly sour. In redwood country one couldn't avoid this plant. We've found it in mixed conifer-broad leaf forests too. A nice salad green.

WILD GREEN, Allium sp. It seems to play hide and seek – it's very inconspicuous but teases with its aroma. Usually the bulbs we've found have been small and tough but they made a nice seasoning, along with flowers.

YERBA BUENA, Satureja douglasii. Grows vine-like along the ground. Ya gotta look close to find it. (I looked so close I found a good case

of poison oak the first time I gathered it.) The leaves are often maroonish in color on the underside. The mint/camphor smell is strong from crushed leaves, the easiest way to distinguish it from other low vines. We let the leaves dry on the stem in a shaded place, then strip them off (the stems are flavorless, and store them in jars for future tea making. Of course tea may be made from the fresh leaves too.

GRASS. New blades of grass make a so-so salad at time when no other greens are available (or identifiable). Supposedly no species of grass is poisonous. But some other plants resemble grass so first taste a very small piece.

Rayo and I have discovered a number of so-far-unionized plants which make good salad greens. Lasting small supplies, of anything that looks promising. Procedure: Gingerly chew up a very small piece. If there is any unpleasant taste or irritation, spit out and keep spitting (or rinsing with water) until the taste goes away. If it still tastes okay, swallow. Wait at least a day. If no bad effects try a somewhat larger piece. Etc. Sample only one new plant at a time.

But DON'T try this with mushrooms. Some deadly mushrooms reportedly taste delicious, and are poisonous in very small amount. It is safest, of course, to always make a positive identification of a plant before tasting.

SWEETS

When we first started living in the woods I would look forward to trips into the big city where there was ice cream, cake and cookies. Tastes have changed, but not overnight. It has taken months, even years. We still enjoy sweets occasionally. But we have come to prefer kinds we can make ourselves out of simple ingredients. One trip into that society buys us all the goodie-makings we want for a year or more. By having stores of sweet-treats we lessen any attraction the sickly-sweet society might have for us. Our selection of sweets is a compromise between what's best for health, what we can store, what's cheap, and what we enjoy.

DRIED FRUIT. Probably the healthiest sweet is fresh, ripe fruit. And we eat large amounts of wild berries in season as well as buying fresh fruit on our rare trips to town. But storage and weight are problems. So we use

some dried fruit, so far mostly raisins and currants, purchased in Fresno where they are grown from Bonner Packing Co., 568 So. Temperance. In 1972 we paid \$6.90 per 30 pound box (23¢ a pound).

Most of our raisins and currants are eaten without any elaborate preparation. We eat them out of hand, alone or with nuts; or add them to spralads and fruit salads. We don't care for them cooked on the stove, but occasionally sun-stew them, by placing a jar of them, covered with water, to soak in a sunny place for a few hours.

VonuWay candy bars. They may be made using a grinder, or more simply by chopping the ingredients with a knife and kneading together. I use raisins/currants and walnuts/sunflower/sesame seeds. After chopping these I add powdered milk, carob powder, dextrose, and perhaps cinnamon, allspice, grated vanilla bean and molassas [molasses]. Vitamin C gives a citrusy tang. I knead everything together, adding water if necessary to get things to stick. After shaping bars I may coat them with some powdered milk, sugar, seed meal, or flour. To help the coating stick to the bars (or balls if you prefer) they may first be dampened with a little water. Most of the ingredients are optional; use what you have, forget the rest.

VonuWay Wheat Chews. Add wheat sprouts/flour to the above. The sprouts may be whole, chopped or ground. Kneading helps everything to adhere. Please don't be discouraged because I haven't given quantities. Any proportion of raisins and nuts seem to taste good. I just add the other ingredients gradually, to taste, especially the spices.

NONFAT DRY MILK. People are the only animals that I can think of besides some animals they domesticate that drink milk beyond the suckling stag [?]. And I understand there are many adults who are allergic to any and all animals' milk. (No, everybody doesn't need milk.) I'm really not sure how good a cow's milk is for animals other than calves. And nonfat dry (NFD) milk is definitely objectionable because it is stored in a finely-divided state. However, until we get more wild game, we feel that milk may be desirable as a protein supplement. And we use it to make some sweet things. In other words, at present we [think?] the benefits we get from NFD milk outweigh the possible disadvantages.

I understand the spray process of drying milk is the most conservative of nutrients. I don't usually cook with NFD milk because I think that

destroys nutritional factors. When eating NFD milk I try to get some fat and some raw wheat along with it, usually in the form of a few walnuts and spoonfuls of wheat sprouts. Adelle Davis (p. 183, LET'S EAT RIGHT TO KEEP FIT) claims that fresh or powdered skim milk, without fat being taken simultaneously, causes loss of calcium and an increased need for Vitamin B₂. The reason for the wheat is to supply phosphatase, an enzyme destroyed by pasteurization but necessary if calcium and phosphorous are to be absorbed from the milk, according to Catharyn Elwood, who in FEEL LIKE A MILLION, recommends one tablespoon fresh ground wheat per quart of milk.

Plain NFD milk. To prepare milk, whether instant or not (what we buy in bulk is usually not instant) we first add the desired amount of water to a quart canning jar. Then we add what looks like the right amount of NFD milk. (If the jar is more than 2/3 full the milk doesn't mix well.) Next we put on a lid and rim, which gives a good seal. (Packages of just lids are sold in supermarkets.) Now we make like a milk-shake machine, holding the jar securely with both hands and shaking enthusiastically for a couple of minutes. Milk or water may be added if the initial measuring doesn't suit one's taste.

Candy/icing. Rayo makes, using NFD milk, dextrose, and a touch of vitamin C powder, with just enough water to mix into a thick paste. Tastes like lemon icing.

CAROB powder is the ground pod of the carob tree, also called St. John's Bread or Locust bean. The tree grows in the Mediterranean, and since the climate is similar it does well in Los Angeles, where I've seen the long, leathery, chocolate-brown pads littering sidewalks. I've tried chewing on some of these pods; they taste sweet – but the pod was very tough. At the time I didn't think of trying to grind then, but I will give it a whirl next time I'm able to get some pods.

We have bought both toasted and raw carob powder. Toasted, it's darker in color and more coco-like tasting than the raw form, which looks like whole-wheat flour and is perhaps sweeter tasting. I'm sure Ford would label carob powder fatty rubbish, par excellence. But it's not as harmful as chocolate, which contains alkaloids, interferes with calcium absorption and

ruins my complexion. Carob powder can be substituted for cocoa in conventional recipes, e.g. in hot cocoa and brownies.

Carob shakes. We add a few tablespoons of carob power to NFD milk and water and shake up. Optional additions are cinnamon, allspice and vanilla. (If there are any lumps in the carob powder we first sift and crush the lumps against the strainer.)

Carob fudge. Carob powder (raw/toasted) is added to ground dry fruit and mixed in well. Nuts, seeds, seed meal, powdered milk, sugar or honey, and spices may be added.

DEXTROSE. We used to eat honey – like it was going out of style. Little did we realize it literally was. Anyway, the price skyrocketed and it's now out of OUR style. We've replaced it with dextrose, which is a type of glucose made from corn starch. Dextrose stores well and is relatively inexpensive. Because we consider dextrose unhealthy we go easy on it. We eat much less of it than we did of honey, which has the image of being a healthy food but is in fact a highly-refined sweet – refined by the bees. A little honey may be better than a little dextrose. But we didn't limit ourselves to a little honey. We are regular Poohs!

Dextrose is a monsaccharide and is supposedly easier to digest than sucrose (common table sugar), which is a disaccharide and must first be broken down into monosaccharide by the digestive system before it can be absorbed.

Jam. I mixed fresh berries and dextrose, about twice as much dextrose as berries by volume (dextrose is fluffier than granulated sugar), and soaked gently. It melted down and became syrupy. The longer it cooked, the thicker and harder it got. I tested it by dripping some into cold water or onto a cold metal plate. That gives an idea of what it will be like upon cooling.

BLACKSTRAP MOLASSAS [MOLASSES]. Adelle Davis mentions blackstrap as a good source of B vitamins and iron. So does Linda Clark. In LIVING THE GOOD LIFE, Helen and Scott Nearing mention using it in their diet. On the other hand in the SUGAR STORY, Fred Rohe says he doesn't much like molassas [molasses], because of unsound agricultural

practices in raising cane, and because the molassas [molasses] comes out of mammoth filtration units which are filled with charred beef bones.

In hopes that the good outweighs the bad, I use blackstrap molassas [molasses]. I usually consider it more as a food supplement than as a sweet but I am getting more and more accustomed to its strong taste and enjoying my molassas [molasses] coc[k]tails. I take a tablespoon or two in a cup of water, hot or cold, once a day. We buy our blackstrap at feed stores, bringing our own containers — clean, white (so no possibly-toxic dye) bleach jugs. Price is about 6¢ a pound.

N.B. Dr. Fred Miller cautions that even such "natural" sweets as raisins can cause cavities if not cleaned from the teech [teeth] after eating. He recommends eating a natural dentifrice last, e.g. apples or raw carrots.

DAILY DIET

In case you wonder what Rayo and I eat from day to day.

Rayo cooks up Instant Breakfast of Vonuans maybe 80% of the time. Other times, as when the sprout farm is closed, he may have toasted wheat (usually plain), or just milk, or plain boiled rice. I fast until noon or dinner, doing well on just one meal a day. Once a week I may fast all day, ingesting only water, and sometimes I fast for a number of days consecutively. I think it's rejuvenating – anyway it makes me feel good and helps me control my weight.

Rayo usually has a few snacks during the day, as opposed to one noon meal. He spaces them out to avoid bad combinations. Raisins. Nuts. Sesame seeds. Milk. Fresh berries or other fruit. Popcorn. On the other hand if I eat lunch I find one meal more satisfactory than snacking, which leads me to overeat. I may eat a meal of wheat sprouts, raisins and nuts; mixed. Or mix up an apple, orange, raisins, nuts and manzanita flour. Or the rest of yesterday's bread and sesame paste. Or popcorn, perhaps with an oily seed. Or a couple of sliced bananas filled with seed paste.

At dinner we take our vitamins (usually C and E, sometimes A and D), any limestone flour, and yeast. We share about a quart of ABC sprouts whenever Happy Days is operating, which is maybe 80% of the time. I add lentil and wheat sprouts to my portion, and perhaps seasoning/dressing. If I eat lunch I proceed it with a tablespoon or two of molassas [molasses] in a

cup of water; otherwise I have my cocktail before dinner. Some typical dinner menus:

Rice, or rice and lentils; sometimes completely alone; more often topped with walnuts, sunflower, or sesame seeds. Or rice and beans, with no topping. Kelp may be used for seasoning. Rayo often adds salt.

Bread, usually wheat and corn. With sesame paste. We may have beans also. If no beans, I may have milk.

Stew of corn, beans, lentils, wheat and rice. Plain or seasoned. Alone or with popcorn.

Lentil-rice soup, with yeast, kelp, garlic and other spices. Popcorn too, perhaps.

Tamales, or tamale cake – corn meal with bean lentil filling.

Popcorn, alone or with oily seeds.

Chapatis and beans. I find chapatis less enjoyable to make than bread, therefore we have them less often.

Sometimes we have fresh vegetables such as carrots, cabbage, cukes, onions, peppers, to add to our dinners.

Sometimes we have small game. A squirrel makes one dinner for the two of us. With a porcupine, the first day we have organs for dinner – heart, liver, brain, pancreas, kidneys, spleen and lungs – ground into a paste and perhaps steamed with corn meal on top and bottom to make a "pie". The muscle meat is dinner for the next few days. We usually have a spralad first. We may have rice later.

We usually do not drink during or immediately after a meal, to avoid diluting digestive juices. We drink not less than 15 minutes before eating nor two hours after. I think it's best not to have tea, because of the sugar and excess water. But on some rainy days we've sat around and drank cup after cup.

We no longer buy supermarket meat (we haven't for ten months): the animals may be unhealthy; the meat may contain hormones, tranquilizers, antibiotics, growth stimulants (e.g. arsenic), preservatives, dyes and deodorants (quite a mouthful, eh?); not to mention the high price and cruel

treatment the animals may receive; and we have no good, easy way to preserve meat. We do occasionally kill and eat small animals; we prefer them to big game because we can eat the meat fresh. We don't like killing but what we presently know, the animal food may be a good addition to our diet.

But don't we ever buy Milky Ways, cupcakes, chocolate chip cookies, ice cream and sherbet? We haven't in months. Occasionally, on trips into that society, we meet friends who serve us such things. But we eat them even less frequently than ECANES zuzuz.

Yes, Virginia, we are for real. We have come to enjoy our ECANES food and don't feel we're denying ourselves any pleasures. We just no longer have any special desire for such foods as orange sherbet and German chocolate cake.

FOOD COSTS (by Rayo). From Feb. to Aug. 1972 we kept records of food consumed. Quantities are pounds per person per month. Costs are calculated from most recent bulk prices paid.

[Transcriptionist's Note: "#" denotes "pounds".]

Stored staples: wheat 15.8# 67¢; brown rice 6.9# 69¢; shelled sunflower seeds 5.8# 227¢; raisins 4.8# 113¢; popcorn 4.5# 52¢; red beans 4.4# 48¢; walnuts in shells 3.7# 74¢; millet 1.6# 32¢; dry milk 1.6# 69¢; buckwheat 0.8# 16¢; soybeans 0.8# 12¢; blackstrap molasses 0.7# 4¢; sugar 0.6# 7¢; alfalfa and subclover seed 0.6# 26¢; dry yeast 0.2# 16¢; dry kelp 0.4# 4¢; seasonings and vitamins 40¢. Total, 52.4# \$8.76. We ate generously of sunflower seeds because we had a large store (someone with whom we had pooled purchase didn't take delivery) and we had doubts about their keeping qualities.

Other foods bought during rare trips to towns (averaged over the five months); fresh fruit 14# 150¢; fresh vegetables 1.8# 23¢; dairy products and meat 3.7# 142¢; pastries 0.2# 12¢; restaurant meals 37¢. Total, \$3.63. Scavenged fruits and vegetables (supermarket trash bins) about 8# 0.0¢.

Forged wild foods, rough estimate: meat (cleaned but including bones) 1#; berries 0.4# (ripe during only one month of the period); greens 0.4#.

Since then we have discontinued buying meat and most junk foods. We are no longer buying sunflower seeds. And we have substituted corn and now milo for the higher-priced grains. We have found a less expensive source for vitamins. Our present food costs are approximately 9\$ per person per month, total.

WHO "COOKS"? I usually enjoy food preparation so I do it. Dish washing, on the other hand, doesn't thrill me, and since Rayo would rather do it than prepare food, he does. We try to divide tasks according to who likes what, not according to sex roles.

SUPPLEMENTS

KELP. Supplies calcium, iodine and trace minerals. We are presently using "Pacific Coast Kelp Meal", distributed by Ocean Pak Kelp Co., 9381 Pine Ave., Chino, Cal. and sold in 50 pound sacks for \$5 by O.H. Kruse feed store in So. El Monte, Calif.

LIMESTONE FLOUR. Calcium. Probably less radioactivity than bone meal. Kruse.

VITAMINS. Hoffman-LaRoche, Nutley, N.J. 07110 sells (e.g.) one kilo (one million I.U.) E for \$40; 5 kilos C for \$26.75.

THE REST...will come as life and learning go on. In the mean time, may the earth's foods nourish you and me, may the sun guild our days, and may we peacefully live the lives we envision.

Enjoy, Hadan

NUDE DANCING MONEYMAKING OPPORTUNITY By: Darby Anderson

Los Angeles is a little more liberal in some ways than other cities. One of these is an area which offers for girls a substantial moneymaking opportunity; namely, nude dancing. All that is required is that the girls have a reasonably attractive body and a moderate ability to dance to Top-40 type music.

The establishments featuring nude dancing are mainly beer bars (most don't serve hard liquor) with a very nominal cover charge (typically, a dollar). The Los Angeles area bars have had to fight very hard to keep nude entertainment as the "authorities" have been trying to shut them down (or at least put bikinis on their dancers) for as long as the bars have put on this kind of entertainment.

Girls needn't fear physical mauling or attack in these places as the bars don't allow this type of thing (they wouldn't be able to find any dancers willing to work there if they did). Tough "bouncers" are employed to prevent any kind of trouble. The character of the clientele depends upon the area in which the bar is located and the quality of the bar's management. It is not difficult to obtain employment at bars where the customers are well-mannered and pleasant to deal with.

Increasing numbers of girls entering the competition for jobs, plus the general decline in economic conditions has resulted in hourly wage rates lower than a few years ago. The usual rate now is \$3 in the Los Angeles area, but can vary from \$2 to \$5. I understand that San Bernardino has just begun to permit nude dancing and wage rates there are supposedly very high — I was told \$12 an hour.

Remember, though, that the wage is just part of remuneration. Girls who work as combination dancers/waitresses get tips, which constitute a potentially larger part of pay than the hourly wages. I generally earn between \$2 and \$3 per hour from tips – you do NOT have to report these to your employer. Such income is easily kept from various types of tax thieves. I am presently (Oct. 1972) working as a nude dancer and, since I recently

changed jobs, I did some looking around as well, so my knowledge of the wages paid and the conditions are current.

Another advantage of this work is that your employer does not pry into your private affairs as is customary in regular corporate institutional employment. What you do on your own time is strictly your own affair.

I have found that it is quite easy to get a job as a nude dancer without providing ANY identification at all to the employer. Unless you look so young that you might be under 21 there is no problem.

In the early days most places paid in cash, so there was no problem of needing ID to cash checks. Also there was no withholding. Now, however, most places pay by check, including withholding. In order to minimize withholding, you should have many dependents, but not a suspiciously large number. Claiming four keeps withholding down to about 10%. No proof is required.

If the bar doesn't normally pay in cash, you can forget subcontracting. In my experience, it is not easy to bargain with the bars. For one thing, they do not seem to like to see any evidence of intelligence such as would be displayed in bargaining.

Combination work involves dancing part of the time and waiting on customers the rest of the time. Drinks are sold to the waitress and she then sells them to the customers; anything over the price charged her by the bar that she can obtain from the customer she may keep (and the bar does not ask her about this).

The girl must be pleasant and cheerful with the customers and to accept extravagant compliments. She will receive many offers for dates and even outright offers of money for a couple of hours in a night. It is expected that these offers will usually be turned down; there need be no embarrassment in doing so. There is rarely any trouble and when there is the bouncer stands ready to handle it.

Most dancers are in their mid and late 20's, many in their early 30's. Few girls are very young or old, although I have seen women in their mid 40's in the business. There is a vast range of appearances among nude dancers, A surprisingly large number are not what I consider attractive at all – e.g., they are flappy, have droopy breasts, have had children and show

stretch marks, etc. You find that different men like different features in appearance. There are always ads in the papers for dancers and there does not appear to be a superabundance of them. You do not have to be "beautiful" to earn a very satisfying income. Naturally, there are girls in this field with great beauty and dancing technique developed through years of activity in this business. However, most of the girls do not fit into this category. Personality counts for a great deal. It takes a little while to develop a style; a girl should not expect to be able to perform like a "pro" immediately.

Apply for a job wearing a bikini. You will be asked to dance for the customers present (if you feel somewhat embarrassed, show up around dinner time when there will be only a few customers around). If you perform reasonably well, that is all there is to it.

A beginner can obtain a job where she dances 15 minutes out of an hour and waits on customers for the other 45 minutes. The combination girl, as she is called, has an advantage over the streight nude dancer in that the customers enjoy being waited on by a girl who dances in the nude (the size of the tips reflect this). Want ads in [the] Los Angeles metropolitan area papers under bar waitress and dancers contain several for combo work. You can work as few as 20 hours a week on up to as many as you wish. Nude dancing as a part-time job can earn you as much or more than a 40 hour a week corporate job. Business is generally best at the end of the week — e.g., Thursday through Sunday. Also, night work is supposed to be much more profitable, although I prefer to work days for personal reasons.

It would be possible for a girl who lives in a remote place, to come to Los Angeles and work one month out of the year. Since the bar would not hire a girl they knew would be leaving in a month, it would be unwise to so inform them. It would be possible to find a job within a few days by using the local want ads. I don't know of any special time of the year when the pickings are best.

In Los Angeles, there is a fairly low risk of being arrested for nude dancing. In many cities within the area, there is grossly suggestive dancing tolerated by the local police – I would guess that this is almost certainly because of payoffs; the degree of tolerance varies from community to

community. One of the reasons for the decline in the hourly wage rate is because of this decrease in risk of arrest.

For your protection: Work at a place with a video tape system. The better bars in the Los Angeles area have video tapes with which they tape every performance each day. This way you cannot be accused of having done something you did not do, a practice most beloved by the police when they can get away with it.

Do not trust anyone at the bar and confide in them. Don't jump to the conclusion that the other girls are "okay." In my experience, many of them are thieves, liars, whores, etc. Most of them are drinkers and quite unreliable because of this.

Keep your money (tips) with you at all times, as it will likely be stolen if you do not.

Make sure that the doorman at the bar sees you to your car when you leave work. Girls have been known to get robbed, kidnapped, or raped after hours, but not when the bar does a good job of protecting them.

The reason that wages are fairly high in this field is that most girls are simply too uptight to handle the work. Despite initial fears on my part, I've found the work to be physically demanding but not otherwise difficult. I could obtain a technical job but frankly I'd rather earn my money dancing and spend the rest of my time on technical and other projects of my own choice. And as the WALL STREET JOURNAL remarked in an article, "tax evasion is a fun crime."

This business is a much more laissez faire one than most others; the only thing the State has to do with nude dancing is their attempts to eliminate it. The bar owners do not love the State; on the contrary they are always on the lookout for agents and they have to employ costly lawyers to protect themselves from the State.

I freed myself from regular institutional employment in just a few days of job-shopping. So can you.

(Updated from LIBERTARIAN CONNECTION #13)

MOBILE MONEY MAKING By: Al Fry

Many people on the road in vans and buses miss picking up extra loot because they don't want to get involved in the red tape of selling. I haven't found it that bad and used to "do my thing" weekends when the county inspectors were off duty. Pick your fruit and get it on a busy corner. Sell your paintings, or your accumulation of scrounged junk, or your jewelry, or your estate sale goods, or whatever, and either do it on weekends or get the state tax permit and such.

I have known leather works and arts-and-crafts people to make the whole national park thing by selling as they went.

I have made mistakes (like a whole trailer of avocados that were prematurely picked) but usually the worst that happens is a reprimand from some official.

"Junkie" friends can make the whole circuit of West Coast "swap meets" and pick up good money knowing what sells where.

TEMPORARY EMPLOYMENT IN VANCOUVER By: C.

It is possible to hang around the clubhouse of local golf courses and tell the people in charge that you want to caddy. What you make is extremely variable: \$0 to \$20 a day depending on your luck and the weather. Naturally this is primarily restricted to summer and at that time competition from public school kids can be a problem, but at least there is no social insurance number required and no life history.

Another good casual job is delivering flyers, but whether or not you must give social security, etc., depends a great deal on whom you work for. (Theoretically, with a little capital you could solicit your own business for canvassing neighborhoods.) This will usually pay \$1 an hour or more.

Strawberry and cucumber picking is also very casual and open to anyone, but you are paid by check and it's hard to make more than \$5 per day.

Once a year GM takes inventory and will hire anyone for the one day only to do the work – and they pay in cash.

Naturally you can also do the old "neighborhood boy" bit and knock on doors to mow lawns, shovel snow, do odd jobs, etc. Just be careful if one of your refusers looks like the type to call the cops – time to find a new neighborhood!

I frankly recommend getting a "social insurance" number though (see "Alternate ID"). With even a "phony" social insurance card you can try many more things: professional writing, other mail endeavors, or almost any unskilled or semi-skilled job. Simply apply for a job you think you can do and give a phony list of work experiences, references, etc. – a very large proportion of employers never check up on this data, especially if reference is made to other cities. A sheer mass of applications for jobs is likely to secure employment.

Here in Vancouver there is also a Casual Labor Employment office where you can sit and wait for a job on a daily basis with nothing other than your social insurance card. A better prospect is the Longshoreman's Hall. If you go there every morning at 7:30 a.m. and crowd up to the dispatcher's window with your S.I. card, eventually you'll get work. And once you've worked it gets easier and easier to get more work, so that you could potentially find yourself working only when you want to (since dispatch is on a day-to-day basis) for something like \$5 to \$6 per hour (or time-and-a-half for night shift).

Jobs as door-to-door salesmen are also pretty easy to come by (especially of the Fuller Brush variety) without much hassle, and can net \$3 an hour or so if you can stand the personality requirements.

Student Placement Offices of Universities are frequently a good source of casual employment, and often no proof of being a student is required.

Getting jobs from a newspaper can be a big chore but it can also be nearly a sure thing if you wait at the press office for the paper to come out and don't try to be overly ambitious. Have a cultured eye for a good prospect and act immediately to contact your potential employer.

INTERNATIONAL EMPLOYMENT By: Pierre

I've just signed on for a job in Alaska with the same company I was working for before, but at about three times the pay. With the money, I'll be able to save, I'll be in good financial condition for a major project in a year or 18 months.

Four outfits which offer information are: Gateway Overseas, New York 10036; Employment International, Box 29217, Indianapolis, IN 46629; Global Employment, Box 706, Orinda, CA 94563; Overseas Jobs, International Airport, Box 536, Miami, FL 33148. I can't vouch for any of these outfits; I got my job by direct offer from the company. The company passed an intra-company resume around, whereas someone on the outside would have had to do the passing around *er*self.

The pay scales are similar in Alaska and at foreign sites. But the other sites offer advantages – if you stay 18 months, there is no tax on the first \$20,000 or less earned. For this reason the minimum tour there is 18 months, versus one year here.

HOW TO AVOID INCOME TAXES

The best way is to work for vonuans or other good people who pay in cash or merchandise, file no reports, and conduct their business the same way. This is legal, so far as I know, so long as income is under \$2050. Or else have a little business of one's own.

The second best way is to work as a "sub-contractor" or "consultant" for anyone. No taxes are withheld but your customer keeps records which might be checked.

The third best way is to work as a regular employee but have plenty of dependents so that no income tax is withheld. S.S. tax is still withheld however.

The following article deals with the last two approaches.

STOP WITHHOLDING TAXES By: John Egnal

There are two alternative forms that the wage earner can use. One is the new W-4 and the other is the W-4E.

The new W-4 has only one line for stating the total number of withholding allowances to which you are entitled. A worksheet, to be retained by the wage earner, is provided to help you figure out how many allowances to claim. Instead of using the worksheet, the person who wants no tax withheld can figure the total allowances needed by dividing the projected annual salary by \$750. Count any fraction as an extra allowance needed. (This formula works if your salary is evenly divided over the 52 weeks of the year. If your wage income is concentrated in shorter periods of the year, it would be necessary to multiply your weekly wage by 52 weeks in order to project an annual rate that would work in this formula.)

Enter your total on Line 1 of the W-4 and sign the statement, which now reads, "I certify that to the best of my knowledge and belief, the number of withholding allowances claimed on this certificate does not exceed the number to which I am entitled."

The resister's legal rationale for signing this statement is his/her sincere belief that he/she is entitled to a complete exemption from paying war taxes to the federal government because their collection violates the U.S. Constitution and principles of international law.

The W-4 is retained by the employer. It is the only statement available to IRS bearing on the resister's claim to exemption from withholding. Any explanation of the basis for this claim would have to be volunteered by the tax resistor, whether by letter, tax return or personal interview. It is a matter for individual judgement and conscience whether it would be wise to volunteer any explanation.

The maximum penalty (Section 7205 of the Internal Revenue Code) for one who "willfully supplies false or fraudulent information" on a W-4 or W-4E is one year in jail and/or a \$500 fine.

The W-4E is an alternative form for people who had no tax liability for the previous year and do not expect to have any for the present year. It would normally be used by individuals who do not expect an annual income of more than \$2050 (the amount that is now exempt for a single person), or by heads of households in which the income will be less than the sum of \$750 for each family dependent plus the \$1300 low income allowance.

By simply signing the W-4E statement, "...I incurred no liability for federal income tax for 1972 and...I anticipate that I will incur no liability for federal income for 1973" the wage earner can prevent withholding of any income tax for 1973. The W-4E expires at the end of each year and must be renewed annually. Since use of the W-4E is legally contingent on the previous year, as well as the present year, it is important that this claim be asserted for the prior as well as the present.

IRS regulations clearly make the wage earner, NOT THE EMPLOYER, responsible for the allowance claimed on the W-4. The employer is not authorized to alter or reject these claims. Neither is the IRS. If your employer doesn't have the right form, or won't give it to you, you can get it just by asking at any IRS office or your local War Tax Resistance Center.

(Condensed from TAX TALK, December 1972.)

BRING IT HOME FREE By: T.

As a general rule: be a "consultant," not an "employee." The direct employee is the most victimized by the tax thieves. All money paid to him is considered taxable income; almost no occupational expenses are deductible. Furthermore taxes are deducted before the employee even sees his pay; this gives the tax thieves the upper hand. The employee must go to THEM for a refund, and a substantial refund may arouse suspicion. And filing for a refund makes him vulnerable to "tax fraud" charges. Finally, social insecurity taxes are unrecoverable.

So, clearly, don't be an employee. Instead become a consultant or services company. If you are presently a hired mathematician, become a Mathematical Consultant. If you are presently a clerk-typist, become a Clerical Services Company. Instead of employers you now have customers. Instead of turning in a time card you invoice weekly or monthly, perhaps on the basis of hours worked, perhaps per job. You receive FULL PAY with no taxes deducted. YOU decide how much taxes to pay. All business expenses such as transportation, rent, telephone and supplies are deductible. And if your gross yearly income is less than \$10,000, your chance of being audited is very small so you can let your conscience be your guide in figuring business expenses. Even if you are audited and cannot substantiate expenses to the tax thieves' satisfaction, you have not committed "tax fraud" – you are liable only for taxes they believe you owe plus interest. And since you, not they, possess the money in question, YOU have the upper hand. If you want, you can appeal to the tax court where cases often drag on for years.

Now the IRS is not unaware of this loophole, since it is enormous and growing. And in a few instances where a vendor has not paid they have gone back at his customer, alleging that the vendor was actually an EMPLOYEE. (There is that dirty eight-letter word again.) Obviously the IRS cannot be consistent in this; if for example a store failed to pay, the IRS could hardly collect from everyone who had shopped there. When such cases have gone to court considerations have been: Did the person work without direct supervision? Did the person hold himself out to the public as

an independent proprietor? One can minimize the risks for customers by conducting himself accordingly. I suggest:

Get business cards printed in the name of your service.

Prepare a brochure, not just a resume, with main emphasis on services performed; especially any services performed at your place of business.

Advertise at least once in a trade journal. Quote the ad in your brochure or otherwise distribute copies to prospects.

During interviews state clearly that you sell ONLY as a consultant or vendor. If you say you would rather work as a consultant but will consider "direct employment," you are apt to frighten your prospect who will then offer you nothing.

Sell to two or more customers per year. If necessary find a friend who will buy some of yours and sell you some of his.

The savings for a customer, compared to "direct employment" include: no social insecurity payments; no unemployment "insurance" taxes; no company-paid "fringe benefits" (which would probably be of little value anyway); less accounting; fewer government forms to prepare; greater flexibility in work arrangements (for example a nomad or remote homesteader who wants to minimize time spent in the city might offer an inverse overtime rate – the more hours per week he works the cheaper perhour he gets, which is forbidden "employees"); less supervision; no union problems; easier termination.

In general the smaller the company the better your chances since the fewer the levels of management involved.

Avoid initial contact with personnel departments if possible. Try to meet relevant working-level supervisors.

Develop a network of finders – individuals in similar work who for a fee will let you know of openings and put you in touch with the right people. Let your finder establish the prospect's interest in you as an independent so you don't waste time interviewing people with direct-employment syndromes.

As a guide to rate, remembering that you will save a company 30 to 50 percent in employment-related overhead expenses, try asking 10 to 20 percent over your last direct rate. If you don't find work readily, don't accept "employment," cut rate!

If your vocation is not one you can continue after you opt out, be short range. Recognize that anything you build is built on quicksand. Don't start a business requiring substantial capital or slow growth of clientele. Don't enter any trade which will tie you down for long. Earn free.

(Condensed from INNOVATOR, Winter 1969)

SECURE BANKING By: Lysander

If you are looking for a means of payment other than cash that most people will accept, you are just about limited to personal checks, postal money orders, bank money orders, or cashier's checks. Virtually every bank keeps microfilm records of all transactions that go thru someone's checking account (I have seen IRS bludg check). However, it is not possible to find more than a few of a person's money order payments. The records exist, but they are buried in such a mass of irrelevant data, from which there is no easy way to sort them out, that a record of any one person's transactions cannot be compiled.

If one knows the date of payment (at the issuing bank) and the amount of a money order, it is possible to find that one money order on film. But it isn't possible to find all money orders bought by "John Doe" written as a payer. And if "John Doe" chooses to write a different name, and to buy money orders at several different banks, you see how the records can be dispersed and hidden. The number of money orders issued by even a small bank (with which I have personal experience) is simply vast; at a large bank the number must be enormous. When a person buys a money order from a bank, e reveals only the amount to the teller, then e writes in the name of the payee and the name and address of the payer later. There is nothing to prevent e from writing a phony name and address for the payer, and so doing won't make it any harder for the intended payee to cash, but if the money order is lost, the payer would probably need to create ID in that name to get his money back. That is the price e would have to pay in order to create an untraceable record.

The bank I use issues money orders for amounts less than \$500, and cashier's checks for amounts \$500 or more. Cashier's checks are a less secure medium because the buyer has to fill out a form giving name of payee, as well as name and address of payer in addition to the amount. Cashier's checks cost nothing while money orders cost 15¢ each, the same as most personal checks. But if anonymity is a concern, it is better practice to buy several money orders to send a large sum rather than one cashier's check. But what I said above about the bank's mircofilm records for money

orders applies equally to cashier's checks; compiling a record of transactions for any one buyer is impossible.

Postal money orders may work the same as bank money orders, but I have no information about them, and I have an aversion to dealing with or paying money to government agencies.

In my opinion, the preferred, secure way to make a small number of payments is with bank money orders, especially those bought in savings banks or savings and loans, which don't even clear thru the institution thru which they are purchased.

It may be useful to know that it is fairly easy to open a bank account, either check or savings, under an alias. One could open an account at a local bank this way, but it would take considerable boldness to do it in person, and it would look suspicious to open a local account by mail. An additional disadvantage of a local account is that the local bludg can find it more easily. If they are looking for assets held in a certain name, they routinely ask all hometown banks if this person has any funds there and how much. Banks readily supply this information. But if your account is out of town and out of state, the bludg obviously can't query every bank in the country to find it, and they would never try.

Opening an account out of town by mail is not at all unusual. And any bank will be eager to accept your money, especially if it's a large amount. They will not ask for proof of identity, so you can use any name you like. You will need a mailing address, and if you provide a p.o. box address, the bank might also want a residential address for their records. If you have a p.o. box in your real name (preferably one that you can't be traced thru), you might give the bank a mailing address of this form: alias, c/o your name, p.o. box so and so, etc. Another option is to use a mail forwarding service as your mailing address.

The bank will also ask you to provide them with a social security number. You might be able to get a number under your alias. Or you could just make one up using the format: xxx-xx-xxxx. If you open a checking account, to the best of my knowledge, the social security number will not be checked, it will languish forever on a signature card in a file in the bank.

Interest on a savings account is reported to the IRS on a Form 1099 only if it totals \$10 or more. So if one doesn't want his social security number looked at too closely, and thus doesn't want a Form 1099 to be submitted, e should see the er interest is less than \$10. This means e should maintain an average balance below \$200. Of course, one could have a much higher balance for a limited period, so e could use such an account to clear large payments, but e shouldn't leave large sums in the account for a long time.

To open an account out of town all you need to know is the address of an appropriate bank. Send away to an obscure out of state commercial bank (for a checking account), asking for information about opening an account. They will send back forms which you fill out and return with money and they will send you your checkbook or passbook. Once the account is open, have all check and money order payments to you made payable to your alias and deposit by mail in this account. You could add an extra measure of security by having payments made out to another alias, then you endorse them over to your account alias. Thus your account alias wouldn't become general knowledge. You will need to be able to write a number of different signatures, fairly distinct looking, one for each alias. But all your signing can take place in private, and signatures don't have to be too ledgible [legible], so you don't have to be proficient at it.

You can make check payments from such alias accounts easily. You could make occasional large payments by making withdrawals from a savings account in the exact amounts of the payments, made payable to your alias, then endorse them over to your intended payee. More frequent or smaller payments could better be done thru a checking account. Getting cash out of such an account would be trickier. One way to do it is to get identification in the name of your alias, then you could cash checks made payable to your alias. A better plan, if you can manage it, would be to make a withdrawal payable to your alias, the endorse the check over to a trusted person who will give you cash for it, then e can deposit it to er account somewhere.

Some of the ideas presented here have not been tested in practice. I am interested in correspondence concerning the topics raised here. I would especially like to hear about any relevant personal experiences, either good or bad. I'll willingly provide further details, some bank addresses, and

suggestions taylored [tailored] to anyone who writes me. (See p. 120, par. 3.)

ALTERNATE ID

CAUTION. Some of the techniques discussed here may be unlawful in some countries and states. Check "your" laws carefully before attempting to create or use an alias. VONULIFE does not recommend that anyone do anything that is illegal.

Some uses of aliases are traditional and quite legal: e.g., by authors as "pen names" and by prisoners of war attempting to escape from enemy countries. America might some day be occupied by Communists or Nazis or somebody who would seize government records. Some day that every patriotic citizen should have alternate id as part of civil defense.

GENERAL SUGGESTIONS: The time to get identification is BEFORE you need it – when you have plenty of time to explore alternatives, think through procedures, and obtain documents by mail; and when an "accident" won't be disastrous.

Carefully think before your own procedure step by step before doing anything. Get all the information you can, of course, but don't simply follow the procedure used by someone else. Opportunities change; what may have worked five years ago may be unworkable and dangerous today.

Do it yourself or have a very good friend do it. Don't try to contact "the underworld" – many people "on the edge of the law" are informers.

Don't use stolen or counterfeit government-issued id such as a driver's license or passport. Such id will not withstand a check, such as by a policeman when one is stopped for a routine traffic violation. And possession is invariably illegal. The best id is genuine id issued by government agencies. The second best is id you create yourself, such as a company id card for "your own" company.

Make sure that your procedures are relatively "fail-safe." For example, use a mailing address other than your usual residential address when writing away for documents, in case you accidentally trigger an investigation.

Never have more than one set of id on your person at a time, in case you get frisked. Keep alternate sets safely cached until you need them, in places you can always get to.

Maintain a clean, neat, middle-class appearance while id is being procured or first used. Don't live at cheap boarding houses or wear ragged jeans. Have several hundred dollars in savings, in currency no larger than \$20, reserved for emergencies so that money is not an immediate problem. Some money might be with the id.

The most likely order for acquiring id is: (first) mailing address; (second) information on how to do it; (third) birth certificate or substitute; (fourth) "social security" (US) or "social insurance" (Canada) cards; supporting paper such as company id card; (fifth) drivers license or non-driver id card; bank account (if necessary); (sixth) passport (if necessary); credit cards (if necessary).

BIRTH CERTIFICATE. There seem to be two general procedures: (1) take over the identity of someone who died as a young child; (2) create a new identity.

THE PAPER TRIP (see bibliography at end of issue) suggests the first. "Go to the main library of any large city, university or college, or a newspaper's principal office and take a look at the old newspapers recorded there on microfilm. Choose a year in which you would have been no older than ten and begin looking for articles in which a young child of your sex, race, and age then was killed in some kind of accident like fire, auto, or drowning. The best possibilities would be those in which the entire family was wiped out, as there would be little remembered of them by now."

By checking birth announcements in still earlier papers on can probably learn the date and place of birth of these children. "While you're poring over the microfilm it would be a good idea to compile a list of at least half a dozen good possibilities. A few might understandably prove useless for you (wrong race, for example), or you might want to construct multiple id's."

Or, at a county recorder's office, "go to the files open to public viewing (photo copies of the actual documents in bound volumes, or on microfilm), and check a book that has death certificates for a year in which you were

under five...The death certificate will list the birthdate, place of birth, race, parents' names, and a host of other interesting facts, all the facts you need to send for the birth certificate..."

"Three facts that should be of considerable benefit are that (1) birth and death certificates are completely separate documents – they are never cross-referenced. They are made in different places and filed in different places. Also (2) by using the birth certificate of someone who was born in one county but died in another county, or state, you have assured yourself of undetectability. It would take thousands of man hours to track down the death certificate, and no agency is going to bother. (3) So far there is no computerization of birth and death records, and very little prospect that this will ever be done, either...

"WHERE TO WRITE FOR BIRTH AND DEATH RECORDS, available from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402. Cost is 15¢. This is Public Health Service Publication No. 630A-1, revised July 1970."

Creating a brand new identity is easier and less likely to run afoul of a check, but getting a genuine birth certificate would be difficult if not impossible. However many babies are born at home – especially in poor rural or ghetto areas, and many of these births are never recorded.

Blank baptismal certificates can be purchased at [a] religious supply store or obtained from a friend who is a minister. Official looking seals and notarization improve appearance. Perhaps one was baptised [baptized] at a church which burnt down or was demolished for freeway construction, by a minister since deceased, in a city far away. THE PAPER TRIP recommends against using birth registration certificates sold by mail-order id places. But these have sometimes been used successfully, especially when supported with other paper.

MAILING ADDRESS. (BEST) The residential address of a very good and reliable friend who is in no personal danger. If ever questioned *e* says you moved away or are on a trip. (SECOND BEST) Commercial mail forwarding service. Check around – try to find one that's reliable. (NEXT BEST) Motel room at which you live only infrequently. You might say you are a traveling salesman and want a place you can leave things. Rent it, of course, without giving vehicle license or any old id. Absence of vehicle is not

likely suspicious if the motel is near an airport. NOT RECOMMENDED for getting documents, though may be good for other purposes: p.o. box or general delivery (not sufficient for drivers license, also more apt to arouse suspicion); cheap rooming house catering to transients (often checked by bludg).

Order catalogs or other innocuous mail at that address, to check it out and get postman and others accustomed to handling your mail, before important mail comes. Have mail left where you can pick it up at any time. Do not supply actual residential address to person receiving mail.

INFORMATION. THE PAPER TRIP is all I have seen in writing. Some of the suggestions may be out of date. Talk to any good friends who have recently been in jail. Id is often a popular subject of conversation there. Some of the prisoners will be experts but their information may be dated. Always try to find out when and where something worked as well as how.

SOCIAL SECURITY. The easiest way to get, last I heard: Pick up an application blank at any post office. (The application might be for your wife or daughter if the clerk asks.) Fill out at your leisure in private. Mail it in. No id is required; there isn't even any check on age or sex of applicant if application is done by mail. There may be a several week delay while agency checks to find out if "you" already have a number; they will check against name and place and date of birth.

There is talk about tightening procedures for obtaining ss numbers, such as requiring fingerprinting of persons over a certain age. So ss cards may not be so easily obtained in the future. If and when procedures are tightened, there will probably be a lively blackmarket in "clean" numbers and cards.

SUPPORTING ID. This can be acquired while waiting for a social security card. These items are seldom adequate alone but help to substantiate other paper in the eyes of the viewer. They include company id cards, club membership cards, library card, ministerial license, solicitor permit, hunting or fishing license, business card.

Several outfits sell blank company id and club membership cards. THE PAPER TRIP suggests: Headlines Corp., Box 202, Cormack, NY 11725;

ECPS, Box 12101, Las Vegas, Nevada 89112; Denobile Service Corp., Drawer B, Shirley, Long Island, NY 11967; Form Distributors, Box 712, League City, Texas 77573; Universal Life Church (ministerial), 601 Third St., Modesto, CA 95351. Send each a stamped, self-addressed envelope for catalogs.

For company id it may be best to create one's own company and get id cards, business cards and stationary printed up. A company id card generally includes physical description and a small photo. The appearance can be improved by sealing in plastic. There are automatic vending machines for this in some stores. Also stationary stores sell adhesive plastic which sheets stick on.

Many national organizations issue membership cards by mail. Check magazines for ads.

For enhancing the appearance of a certificate one may be able to purchase a notary embosser from a place which sells them. If not an adequate facsimile can be made in any of various ways by someone skilled at metal working or photo engraving. Blank, gummed sales can be obtained from stationary stores.

Stationary stores also sell books of rent receipts.

The id material which the average person carries on *er* body is usually dated over a long period of time and often includes items which have expired, are worn looking, etc. Few people ordinarily carry their birth certificate, marriage license or draft registration on their persons. (Last I heard, having a draft card in storage at one's permanent address was sufficient.)

DRIVERS LICENSE. Requirements vary from state to state. In California a few years ago a social security card plus a company id card and a few other pieces of supporting id were sufficient for someone who did not appear to be under age. Oregon, according to their manual, requires that an applicant provide "written evidence of age and identification" which may consist of "an original or certified copy of a birth certificate; baptismal certificate; official papers issued by a court of record such as adoption papers; Armed Forces identification card; alien registration card; a life insurance policy; certified copy of an application for a professional or

occupational license; certified copy of school attendance record; Selective Service registration card; or an out-of-state driver's license."

"Your Social Security number is used on the license (only) in Alas., Ind., Iowa, Mass., and Miss." As of 1971 your photo is on the license in "Alas., Ariz., Calif., Colo., Del., D.C., Geo., Ida., Louis., Mass., Mont., N.M., N.C., R.I., S.C., Mich., Texas, Utah, Vir., Wash., and Wyo. An excellent book which provides basic information on each state's driver's license, including color reproductions of samples, is the DRIVERS LICENSE GUIDE, \$3.95, which can be purchased by mail from: Drivers License Guide Co., 1492 Oddstad Drive. Redwood City, Calif. 94063...This book is used as a basic tool by law enforcement and businessmen in combating criminal deception." (THE PAPER TRIP)

PASSPORT. "Basically, with a valid U.S. birth certificate (to prove citizenship), one good physical id (for personal identification) and a loose \$12.00 bill, you can get a passport, good for 5 years. Here is the list of documents accepted as proof of identity: previous U.S. passport; a certification of naturalization or of derivative citizenship; driver's license; a government (federal, state, local) identification card or pass; an industrial or business identification or pass." (THE PAPER TRIP)

As of a few years ago a certified baptismal certificate was accepted in lieu of a birth certificate, if accompanied by a letter from state of birth stating that no birth certificate could found for that person. Getting such a letter is routine if someone never had their birth recorded.

SPECIFIC SUGGESTIONS. To get a social insurance number "all you need to do is look thru an underground newspaper for a commune or co-op (or co-op information center). Move into the commune under the proper name. Write for a social insurance card under than name, giving as birthplace somewhere in Quebec, where births were not registered, or some small town in B.C. with no hospital nearby. When your card arrives move out of the commune without a forwarding address. A bank account can be opened with only the card and checks from employment can be cashed there." (Vancouver, B.C.)

"Get a social security card – you don't need id to get one and you can pick it up or have it sent to a temporary address (from which you give NO forwarding address). Get a savings account (a checking account will

probably be more difficult to get with a small amount of id, since it is easier for the bank to get ripped off) in the same name. If you can't find a bank that will let you have one for the id you have (social security card and possibly a birth certificate you bought somewhere – see LA FREE PRESS for ads) then you'll have to go to the trouble of getting a non-drivers id card from the Department of Motor Vehicles. They will give you one without requiring any more id than your phony birth certificate and your social security card." (Los Angeles)

"I heard (at least third hand) that the Mississippi state capital building burn in 1929, destroying all birth records."

About finger prints, THE PAPER TRIP suggests: "Find a surgeon who can do a skin graft on your finger (from your foot?) and thus eliminate your old prints...A physician will charge anywhere from \$1,000 to \$3,000." According to THE PAPER TRIP the FBI often fails to identify prints even when no effort has been made to alter prints. According to another source: "At least as of sometime ago it was necessary only to change one or two finger tips to a new but natural looking pattern to fail identification in cases where identity was not suspected, because the major features of all ten finger prints are used to generate the identifying number (except for "most wanted criminals")." "The best solution to this problem, of course, is never to get busted."

Thanks to several people for the information in this article. I don't guarantee that it is accurate. I would like more information for future issues, including warnings about procedures which no longer work or are dangerous.

SECURE MAILING ADDRESS

Here are some suggestions from several people for getting mailing addresses for general use (not for id creation).

"I rented a box here in town to see how their system worked. I was surprised at the amount of bludg paranoia I ran into, requiring a residential address (verified by the carrier that one has received mail there); id, and all sorts of restrictions on the use of the box."

Suggestions for getting a p.o. box: "Take over the box of someone who no longer wants it. Add your name to the names authorized to receive mail at box (takes only a post card from the original box holder) but the post office may object if the list of names gets too long. Or get mail addressed c/o to the original box holder. Usually after doing the later for a while the p.o. clerks will learn that you "belong" and the c/o may then be deleted. Pay the rent by money order and illegibly scribble the name of original box holder (though clerks presently don't seem to care who pays the rent). Alternately, get a friend who is moving away to rent a box for you."

If you have id you don't mind sharing with the p.o. people "a completely no hassle way to get a secure p.o. box is to move into a furnished apartment, rent box giving apartment as home address, then move. As long as you pay box rent on time, p.o. won't ask about your actual residence. Of course don't file change of address with p.o. Inform your correspondents individually of new mailing address. If you open a box this way, the only way anyone can find you thru it is by staking out the box to see who picks up the mail."

"The paranoia we have encountered has been almost entirely at the time of initially renting the box. P.o. clerks give little trouble thereafter, so long as nothing is done which causes them extra work."

"Arrange with someone trustworthy a 'residential' mailing address. Either e tells the postman you are visiting, or you use c/o for a while to 'train' the postman. If anyone checks your 'landlord' says you are away on a trip. Your landlord can leave mail in a drop for you which should be outside any dwelling, accessible 24 hours a day, and so located that it cannot be

easily kept under surveillance – also so that neighbors won't get suspicious. The 'landlord' doesn't need to see you each time you pick up."

SECRET RADIO NETWORKS By: Pierre

It looks like there will soon be authorized a new Citizens Band radio service, called "Class E" (vs. the present "Class D"), at a much higher frequency (not that vonuans would worry about 'authorization'; it's just that that would cause the market to be flooded with a large assortment of cheap gear for this band). This frequency would carry a lot less far than the old Class D (making overhearing by the bludg much less likely), and could be directionally beamed by hand-held devices (instead of a roof full of plumbing, as now required). In an area, cheap transponders that would rebroadcast any received signal could be placed in various places with commanding views (e.g., hidden in the tops of trees). Monitors could keep directional receiver antennas pointed towards these (solar cell powered?) relays. Callers would just point their directional antennas, and call. As bludg located one relay, another could be used, placing new ones from time to time so there would always be plenty. To get fancy, they could be equipped with selective-call systems, like car phones are now, so that they would only respond when the correct sequence of tones were transmitted. A few strategically-placed banks of relays within range of each other around the upper slopes of a peak (the peak itself would be best, but of course it would be very vulnerable to detection) could cover hundreds of square miles, with only one or two trips a year needed to replace broken and discovered stations. Peak-to-peak relays could tie as much territory as you wanted into a net. With different tone sequences, or maybe just by pointing your antenna at a different spot, you could key into whatever locality you want to reach. Sort of like Direct Distance Dialing. Or maybe each area could have its own frequency, with relays in all areas on that frequency to relay calls to (or from) that area from (or to) all the others. The Class E band has room for dozens of channels, and of course you could use the same gear for frequencies lying some distance outside the "official" band. Perhaps some single channel or group of channels would be set aside for communications from individuals to relays in all areas, since the areas would be out of radio range of each other.

An ambitious project, but maybe eventually there will be enough vonuans to make it economically feasible.

WHAT IS BIG BROTHER WATCHING? By: Rayo

"There is no way to hide. They'll soon have satellites in orbit which can count the hairs on a fly's behind. So you might as well give up and become one of the sheep – like me." Etc.

I have little inside information on Big Brother's latest sky spies, but I discover that people who seem to delight in warning about them usually know less than I do. Here is what I've been able to learn.

The devices which PRESENTLY exist are costly and easily "faked out." They are not in wide use.

Item: There are few things easier to detect with a heat sensor than a forest fire. It is much hotter than anything else in the woods. Yet, last I heard, the Forest "Service" is still depending on human observers, some in watch towers, some in aircraft, to spot smoke. They experiment with heat sensors and put out press releases now and then, but such devices are not in common use.

Item: Aerial photographs have been routinely used for map making since the 1940's. And such photos are reportedly used by local property-tax accessors [assessors]. Quite likely large buildings and fields are being spotted. Small cabins in wooded areas are rarely spotted, even when no effort is made to hide them, according to property-owners I know.

Item: Squatters who have been discovered were first seen by persons (most often hunters) walking thru the woods. The one exception I've heard of had an open camp fire and was spotted from the air by the smoke.

Nevertheless surveillance devices will probably be improved and come down in price. Some may be widely used in 20 or 30 years. So it's well to start learning what they can and can't do.

One kind, which has been used in Vietnam, essentially consists of a microphone and a small radio transmitter. It is distributed on the ground, picks up sounds and radios them to processors which "listen" for human voices, internal combustion engines, clang of metal on metal, or other

"unnatural" sounds. Although the individual devices are cheap, covering a large area with them is costly. And they are easily detected.

Another category of detectors, which may be carried by aircraft or satellites, make use of radiation below the frequency of visible light. Such frequencies do not respond to as fine detail as visual light does, which is one of the reasons eyes sense the frequencies as they do. But these frequencies behave differently than visual light and the difference can be made use of. Examples: clouds are invisible at some radar frequencies. Metal shows up "white" regardless of its visual color, unless coated with a radar-absorbing substance. A hot, black stove shows "bright" to infrared. These frequencies can be thought of as additional colors.

For analogy, imagine a land where people see everything as shades of grey, as does black-and-white photography. In this land mottled orange-and-purple coveralls might be good camouflage — until someone invents color detectors. Then a vonuan must switch to a mottled green-and-brown. Similarly, an aluminum roof painted drab colors may be sufficient today. But if and when metal-sensing frequencies are in wide use, the aluminum must be covered with a substance that is also "drab" at those frequencies, or replaced with a non-metallic material.

Photographs can be taken with infrared and radar as well as visual light, and compared with photographs taken earlier to identify changes. Alteration of a small area is not easily spotted this way. Appearance will vary depending on time of day (shadows), day of the year, brightness of the sun, recent precipitation, and position of the aircraft. And changes caused by animals and weather must be distinguished by the work of humans. Of the latter, changes caused by "authorized personnel" (loggers, tourists, etc.) must be identified. Those remaining must be individually checked out by men on foot or let down on a rope from a helicopter. (There are few places in wooded, mountainous country a chopper can land.) This is time-consuming, potentially dangerous work. Aerial detection and data processing can be automated to a large degree to reduce costs. But investigation can't. So Big Brother can't afford a high percentage of "false alarms."

In Vietnam there wasn't much investigating. They simply bombed anything at all suspicious. The result? They tore up much of the land and

killed many innocent bystanders at a cost of billions of dollars – without defeating their enemy. How likely are the bludg to destroy all the forests of North America as they have parts of Vietnam (which is a small country) just to "get" some people who only want to be left alone?

The Superstate may not survive in its present form for another 30 years. Even if it does the bludg are apt to be too occupied with day-to-day problems of staying in power to devote much of their resources to people who are not a direct and immediate threat. But assuming the worst, what might vonuans of the future do?

- (1) Move now and then. If a spot is investigated in 1984 because it looks different than it did in '82, this is no concern of someone who moved on in '83.
- (2) Create diversions. For example, it takes only a few minutes to arrange some branches to form a crude dwelling, drape light plastic over it (to provide solar heating for the benefit of heat detection), lay a little aluminum foil on the roof, and hang up a couple of tin cans so they bang together in the wind at irregular intervals. One person in one day can improvise enough decoys to occupy a crew of investigators for a year.
- (3) Blend in. Millions of animals bear, deer, porcupines, coyotes, packrats, elk, squirrels, birds, insects are busy day and night altering the landscape in their quest for food cutting, gnawing, prying, ripping digging, moving. Trees die, blow down, knock down other trees and bushes. A rock washes loose and rolls down hill, crushing vegetation and loosening dirt. If one disturbs the environment no differently than do other creatures, there is little to worry about.

More sensitive and discriminating detectors will be developed. But concealment and deception techniques will also improve. And technology favors the hider in a prolonged contest. A hider can always disguise, cover or randomize some more. Whereas the "noise level" of the natural environment is a limit beyond which the seeker's detectors cannot economically go. Occasionally people will be found – concealment has its costs so one rationally employs just enough to reduce probability of discovery to a low level, not to zero.

In the immediate future I don't believe "science fiction gadgets" will pose much of a threat. A human is a highly-sophisticated system of sensors and information processors, honed by hundreds of millions of years of evolution. An object or process which can't be seen, heard or smelled by someone walking 100 yards away is not likely to be found. But artificial detection capabilities should be considered when developing new structures. My own guidelines:

Keep structures small, low and dispersed.

Use irregular shapes which blend with the terrain.

Build among trees and bushes when possible.

Do not use artificial heat. Build super-insulated dwellings which body heat will keep warm. Or build dwellings well insulated from the outside but not from the ground, for warming to ground temperature.

Build mostly of natural materials.

Minimize tree cutting. Cut only trees which are amongst other trees and away from the site.

Minimize use of metal. And use metal in small pieces. A plastic sheet covered with flakes of aluminum (electrically insulated from each other) is less detectable than a sheet of foil.

Use internal combustion engines little or not at all.

No open fires.

When digging, dispose of surplus dirt under dense bushes or in slide areas. Don't dump in a creek or sprinkle over a wide area.

Keep flexible and fairly mobile. Don't try to build a building or lifestyle to last a hundred years.

CHOOSING A MOTORCYCLE By: Al Fry

Here are a few more opinions:

Firstly there is a sort of law that the faster the piston thumps the faster the motor wears out. Harly's and BMW's have thumped out a hundred thousand in scads of cases just because of this. A typical Honda with its faster revs may get over 20 thousand without trouble and even the little four-cycle 100 cc jobs will rev out 15 thousand if you keep good oil in them. But the typical two-cycle ear annoyer is not a very long lasting engine despite its simplicity and only by using inconceivably expensive 60¢ quart oil with the gas mix can you hope to push the miles much above ten thousand without new rings. Biased? Well I've had the best of the two-cycles and don't think they give the value that a four-cycle will.

The English with the exception of Norton and couple of lesser knowns have also begun to put out pretty sad machines. Beware unless you get a deal.

Honda still makes a tolerably fair bike with a slightly weak transmission for hard kicking clods. And Jawa made a two-cycle that was A okay until a few years ago — even an old 1950 would go 20,000. But things constantly change and I'm certainly not covering the big bikes in this rundown.

I think that a great little bike is the Honda 90 with the instant gear down mechanism. I have ten thousand on one and can't complain. Parts, even used and swap-meet parts, are easily accessible all over and this certainly is a favorable point when in distant and unfamiliar territory. As stated, the little bikes are the most economical but it takes about a hundred cc's to pack around another body reliably.

After acquiring a bike I immediately get enough tools for the thing to take everything apart and that includes a small tire pump. And then I proceed to get some very large saddle bags — last ones I made up from military duffel bags. With a sheet of something to stiffen the inner wall and sewn with nylon thread, I'm ready to go to the corner store or start for New York.

The freeway ban is a pain but can usually be circumvented by grey matter and a map. The only problem I've found is slight harassment as in Arizona and I hear on East Coast. In any event it is safer than thumbing for me at least – get stuck in Burns, Oregon without transportation sometime and you'll find your thumb getting rested in a nice cell for a couple of days – in fact it's getting so you've got to get a guide to safe hitching.

To answer a question, yes, we carry a little equalizer most of the time and it is carried in a battery radio case to allay hassle. I also carry a very waterproof rain outfit in wet weather country since driving rain can soak you through a small leak. Nasty and cold weather can make cycling really miserable unless a person is prepared.

But cycles are fun and have gotten me into a lot of breathtaking back country on a bare budget.

LUBRICATING OIL By: Al Fry

Since just about everybody now, regardless of their life-style, is dependent to a degree on wheels, let's give our two-cents worth on oil.

Firstly, if you have an air-cooled car, you are MURDERING it unless you use the VERY BEST oil you can get. The crank regrinding shops in every city are full of chewed up cranks from guys who tried second-rate stuff and infrequent oil changes. The extra heat will break down a cheaper oil in jig time.

For an ordinary water-cooled engine the main thing is to keep the detergent action active even if you have to add a little dash of detergent to the really dark and old oil. (DuPont and several others put detergent out in little cans.)

Gasoline dilutes the oil to some degree and it's good to check for oil that doesn't quite look or act right on the dip stick in well worn engines. The carbon or black won't hurt a thing and shouldn't mean too much.

The bus lines and such use a GOOD QUALITY re-refined oil which gets them 10,000 miles between changes and is really better than regular oil (heat-wise). But it's a little hard to get, and the best method is to head to your nearest oil supplier (dealer) and take enough cans to get 10 or 15 gallons to get a good discount. You can get the best 60¢ oil for 25¢ or so.

I use "heavy equipment" oil which is very heavy duty and made to take a beating in "cats", etc. — a littler cheaper and better. Never use non-detergent in anything but an antique or something without an oil pump. Such "grocery store" oil helps keep the mechanics very busy and is a poor value at any price. STP may get you through a smoking car inspection but does little else except make a 40-weigh oil out of 20 or 30 weight. Warm up you're engine a little longer if you use it much.

FALLOUT DETECTOR Review By: Rayo

The Henry Richter Corp., Box 516, San Gabriel, CA 91776 sells a simple passive (no electronics) radiation detector. It consists of small beads within two concentric transparent tubes. Gently shaking it causes the beads to take on electrostatic charges, repel each other, and float along the sides of the inner tube. Radiation discharges the charges and the beads sink to the bottom. The greater the intensity of radiation, the more quickly the beads settle (120 roentgens/hour, 15 to 25 seconds; 10 roentgens/hour, 5 to 7 minutes; 3 roentgens/hour, 15 to 20 minutes). It is supposedly sensitive to as little as 3/4 roentgens/hour. (The beads in ours remain suspended for days if the only radiation present is natural cosmic rays, etc.). It's about three by four inches and weighs 5 ounces. Prices postpaid are \$7.95 each; 12 to 95 for \$4 each. (A "distributor film" can buy a single sample for \$4.75.) Richter also sells models for industrial/dental xrays and color TV. Thanks to Paul Doerr for [the] tip. We have only had ours a few weeks, but it seems inherently more reliable than the surplus CD units.

TEACH READING AT HOME A SIMPLE, UNIQUE WAY By: Rayo

Conventional written English is difficult to learn because most words are not spelled like they sound. Examples: the same letter "a", stands for different sounds in "father," "baby", "cat", "what", and "all". And the same sound is spelled differently in ski, be, beet, beast, money, baby, either, and piece.

Chaotic spelling may be only a nuisance for an adult who recognizes most words by overall shapes, but it's a cruel handicap for a young child trying to sound out words. A six-year-old recognizes several thousand spoken words. If words were spelled like they sound, e could read and write er entire vocabulary as soon as e learned the alphabet. As it is, learning by "phonetic" methods a child must memorize hundreds of rules and myriad exceptions; learning by "look and say" e must learn every word separately. It's not surprising that long, dreary years are spent learning to read and that most people never read easily or well.

One way to reduce the drudgery is to first learn in a special phonetic alphabet, using books printed in that alphabet.* Transition to the regular alphabet occurs only after a child is able to recognize most words by their overall shapes.

Another way – the inverse: retain traditional spelling but at first pronounce each word as written. I call this "visionetic pronunciation" (v.p.). V.p. requires no special books, as does phonetic spelling. And v.p. makes early communication more vonu (discussed further on).

Here is my v.p. alphabet. "Ch", "sh", etc. are considered single letters even tho they are typed as two separate marks; I connect them together when handlettering. In [the] following description, letters and words underlined are pronounced visionetically; words within "quote" marks are pronounced traditionally. Reasons for choosing these pronunciations and some options are discussed at the end of this article.

- a father, far, what, or at (but NOT "baby" or "ball")
- b <u>b</u>us
- c <u>cup</u> (NOT "cell" or "ocean")

```
chuck (not "chemical")
ch
d
      duck
dh
      "the"
      best, bell, berry, or peso (Spanish), (NOT "be")
e
      fun, if (NOT "of")
f
      gum (NOT "gal")
g
      form mouth as if to say g but instead of popping tongue, force
gh
      air past it to make a growling noise, similar to kh
      hut, if not part of another letter such as ch or sh
h
      ski, is, bill, irritate (NOT "light")
i
j
      jeu (French), "measure", "azure", "rouge", "vision" (NOT "jump,
      "jabon"[?])
k
      kitten
kh
      khaf, "loch", "Bech", "jabon"
1
      luck, belt, or girl
      mug, am
m
      nut, in
n
      cañon ("canyon")
ñ
      singing
ng
      dog, for, proceed, hot (British accent), but not N. American),
O
      not (only if short as in Spanish, not drawled out into u), (NOT
      "love" (N. Amer.))
      puff
p
     quick
q
      phone
ph
      run, far, sour
r
      begin r with whisper, like wh
rh
     sun, yes (NOT "is", "sure")
S
sh
      shut, fish
t
      tub, it
      thumb (NOT "the")
th
      ruby, put (NOT "use" "up")
u
      van, love
V
      won or few
W
      what
wh
      six (NOT "xenon")
X
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- y young, baby or myth (not "by")
- z <u>z</u>oo (NOT "azure")

Pronounce each vowel briefly but distinctly, like in Spanish. At first say each one as a separate syllable. Examples: <u>la-te</u>, <u>be-a-u-ty</u>. Each vowel letter may be pronounced in several ways. The first variation listed is preferred when pronunciation is changed from traditional. But I try not to change vowels which need not change (sometimes difficult); this is to "preserve" those sounds so that later transition to traditional pronunciation will be easier. E.g., I pronounce "bather" to rhyme with "father" rather than "rather". But I retain the traditional pronunciation of "rather" (in my own speech when with a child, I do not correct a child who rhymes "rather" with "father".

Try to pronounce every letter including doubled letters. E.g. <u>bo-ok</u>, <u>bil-l</u>. If pronunciation is difficult insert a very short neutral vowel, above, woman, represented here by "",". E.g. <u>k,ni-fe</u>, <u>tho-u-gh,t</u>, <u>bac,k</u>. Pause distinctly between words.

LEARNING TO TALK: A baby starts learning language when only a few months old. If *e* is to learn v.p., v.p. must be regularly used by people around *er* from birth if not before. Don't change pronunciation of a child already learning to talk.

You will have to speak very slowly and carefully at first. But this makes picking out and associating words easier for the baby. Conversation may be easier at first if written out, then read, tho this will probably be necessary only the first few days (the adults are learning). After a few hours practice Haelan and I can converse easily tho slowly, without writing.

Anyone who cares for the baby and does not know v.p. (such as a babysitter) is instructed to remain silent. Other visitors are not a problem. At first a baby learns mostly from what is spoken to it, not from overhearing conversation between adults (according to July 72 PSYCHOLOGY TODAY page 71).

Reading aloud slowly to a baby provides practice both for the reader and the baby. But I wouldn't try to get the baby to read until e shows interest.

LEARNING TO WRITE/READ: Many children are "naturally sensitive" or potentially interested roughly from age two to four; age six or seven, when those kid concentration camps start trying, is a poor age for most people (according to some Montessori educators).

I might begin by adding captions to pictures or writing down a brief story or letter or diary entry the child dictates. I save these up and read them back upon request at a later date. Sometimes I point to and sound out each letter of a word, then ask what the word is.

I use a lettering style which is simple yet similar to the type in most books. I use lower-case only; to capitalize I make the same shape larger. My present style:

I connect together m, etc., to emphasize that they represent single sounds.

When talking about letters I name them like they sound. "G", "H", and "I" are g, h, I (rhymes with ski) not dii, eich, ay.

Manipulating a crayon is difficult for a young child (like doing it with your left hand if you are right handed). I provide an electric typewriter, or else I encourage *e* to print big.

I would never teach cursive script – those nasty little squiggles which are so difficult to read. For greater speed a child may learn to type, or later learn a shorthand if e wants.

Reading will probably be easier and more interesting if the books are about things a child sees and does rather than fantasy. (The real world is plenty fantastic to someone who has only been in it a few years.) If your life-style is "unconventional", suitable beginning books may not exist – you may have to write your own. (Dick and Jane might be very strange people to someone who has only lived in a Shuswap in the woods.)

A few letters are pronounced alike in v.p.: \underline{c} , \underline{k} and \underline{g} ; \underline{I} and \underline{y} ; \underline{u} and \underline{w} ; f and ph. Consequently a child may spell some words unconventionally

(kat, babi). [I] wouldn't "correct" *e*. When *e* reads traditional books *e* will learn that "cat" is used more than "kat" and may change then if *e* wishes.

LEARNING TRADITIONAL PRONUNCIATION. I would provide opportunites for learning t.p. by age six so that a child will learn it well enough to "pass" as a "native-born citizen" when adult, if *e* wishes. A child will most likely pick it up from outsiders without special prompting. Many children notice and enjoy imitating regional or foreign accents. If a child meets no outsiders I would speak t.p. occasionally, or supply a cassette player and popular songs, but I would wait until *e* is reading well.

SPECIAL RELEVANCE TO VONU: V.p. may be the quickest and easiest way for a child to learn to read at home; the parent must spend some time learning v.p. but from there on the process is easy. Other advantages:

V.p. provides a "natural filter" for young children against the flood of bias and irrationality on TV and radio, which can come not only directly but second-hand from playmates. At the same time v.p. reduces the barrier to printed words. Thus reading will be relatively easier whereas listening to a "news" broadcast or the gossip of outsiders will be more difficult.

There is much greater freedom choice in written matter than on radio/TV and v.p. takes advantage of this. Censorship of books and periodicals is almost impossible – "even" in Russia there are samizdat – underground newsletters; whereas censorship of broadcasting is easy.

V.p. also serves as a filter going the other way. An outsider could not easily interrogate a small child.

Even after a child learns t.p., v.p. remains useful as a within-the-family code when among strangers. If spoken rapidly it is as incomprehensible for outsiders as pig latin. But, unlike pig latin which has a very distinctive sound, v.p. sounds like a heavy foreign accent and is more "acceptable".

These benefits are not offered by other reading/writing aids. With either v.p. or a phonetic alphabet a parent must invest some time learning it. And with either system a child will eventually learn the traditional way. But with a phonetic alphabet the child's reading is limited until transition,

to the few books in that alphabet. Whereas with v.p., the child's reading is limited only by *er* vocabulary.

A note of caution: visionetic pronunciation is not a fully-tested system; my only experience teaching young children to read was before v.p. I don't forsee [foresee] major problems but I can't guarantee there won't be any. If you are the first to test v.p. and get good results, you may be able to write and sell instruction manuals.

PRONUNCIATION REFORM: I'm interested in v.p. mainly as a learning aid, "cultural filter" and spoken code. But I believe that changing pronunciation conventions is more likely than changing spelling conventions. Reasons: (1) English is spelled almost the same world-wide whereas pronunciation varies greatly. Uniformity of spelling is one of the few desirable features of English. Why give it up? (2) Spelling has changed little in centuries; pronunciation has changed greatly – which is how spelling became non-phonetic. (3) When words are adopted from foreign languages which use Roman letters, spelling is rarely changed, pronunciation is often changed. (4) A spelling change would obsolete billions of dollars worth of books; a pronunciation reform would less-seriously affect old recordings and movies. (Much singing and acting is deliberately in dialects.) A hundred years ago, in the hayday of spelling reform proposals, relatively few people read but everyone spoke. Today the logical change is the other way.

A reform movement isn't necessary. People who initially learn v.p. will "naturally" speak it when around others who know it. As more people learn v.p., old ways will die out.

COMMENTS AND OPTIONS: Pronunciations are chosen to: minimize spelling uncertaintys [uncertainties]; be compatable [compatible] with those foreign languages which are near-phonetic; be easy to pronounce; minimize rules; minimize changes from t.p.; retain all frequent t.p. phonems [phonemes] (sounds). These criteria sometimes conflict. E.g., for spelling certainty "I" and "y" should be exclusive. But "y" pronounced like in "yes" would be difficult to say in "baby".

"Dh" is rare in written English but is included in the v.p. alphabet to facilitate learning the "the" phonem [phoneme] and thus transition to t.p. I

suggest that some things of the family be given proper names beginning with "dh".

<u>Gh</u>, <u>kh</u>, <u>rh</u>, <u>wh</u>: If any of these prove very difficult for YOU to say (they won't particularly [be] for a child; they occur in many languages includes Anglo Saxon (Old English)), ignore the h and pronounce the same as g, \underline{k} , \underline{r} or w.

"C", as it occurs in text, is pronounced cow about 75%, <u>c</u>ell about 17%, and o<u>c</u>ean about 8% of the time – the reason for my choice. But if a child will also be soon learning a Romance language, such as Spanish or Italian, follow the rule for that language (which holds for most English words as well): cell before "e", "I", or "y", otherwise cow.

"Rr" may be pronounced with a trill and added to the alphabet to make easier the learning of a foreign language with such a phonem [phoneme].

*Such an alphabet is initial teaching alphabet (i.t.a.). I.t.a. letters are designed so that overall shapes of many words remain similar to their shapes when spelled traditionally, for ease of transition. THE ITA HANDBOOK was sold for \$2 by i.t.a. Publications, 20 East 46th St., New York 10017.

[Transcriptionist's Note: The "Initial Teaching Alphabet" was popular in the 1960s but has since fallen out of use.]

HOW TO STAY OUT OF PUBLIC SCHOOLS

Advice from people who have done it boils down to:

Don't register a child or start in *e* in state schools. Don't get on their records. Instead I find a freeish private school and let *e* learn at home.

If *e* is already in state school: Check by phone with district superintendent to find out what forms, if any, are required to remove a child. Do not give your "real" name when checking. Obtain any forms. Stop going to state school. Send the school a note (or form, if required) by mail saying either you are moving to another state or that you are enrolling the child in a private school.

Keep the child off the streets during school hours. If you must go somewhere with the child during school hours and questioned, say the child has a dental appointment or something. Have stories all prepared and practiced.

Have mobile or rented living quarters be prepared to move if the neighbors show suspicion.

This probably won't work if you live in a small town where gossip travels fast. Either live in or around a big city or far out in the woods.

Don't self-righteously tell off the school bludg. And don't spend your precious life trying to "reform" the public schools. That's trying to fight them by their own rules. And slavery "reformed" is still slavery. Instead, always tell the Man what He wants to hear, then go do what YOU want to do.

For sources of materials for learning at home, see THE LAST WHOLE EARTH CATALOG.

Sources for information in this article: "The Free Man in the Slave State," Allen Humble, INNOVATOR, Autumn 1968, reprinted in VONULIFE #5; NO MORE PUBLIC SCHOOL (see bibliography).

QUOTES ABOUT EDUCATION

"Even if the kid did decide he wanted a government education certificate he could (at least in Vancouver, BC) get a high school diploma starting from zero in about three years if he is over 25 or so. That's a hell of a lot better than 12 years of boredom and bullshit, slavery and servitude, stagnancy and...Formal "Education" doesn't really mean as much in society as I thought it did (though learning does). The Public School System is just a great big concentration camp for kids as anyone knows who can see the fences and watch them marching EN MASS." (Letter in VONULINK)

"Babies are Zen masters, curious about everything. Adults are serious and bored. What happened? Brain surgery by the schools." (Jerry Rubin, DO IT!)

"Obviously, a school that makes active children sit at desks studying mostly useless subjects is a bad school. It is a good school only for those who believe in such a school, for those uncreative citizens who want docile, uncreative children." (Paul Goodman, COMPUSLORY MISEDUCATION)

"She hears things all day long that make no sense, but she doesn't appear to mind. She lives and moves in uncertainty as naturally and easily as a fish moves in water. When, and why, do children begin to crave certainty?" (John Holt, HOW CHILDREN LEARN)

"Every time we show Tommy how his engine works we are stealing from that child the joy of life – the joy of discovery – the job of overcoming obstacle. Worse! We believe that he is inferior, and must depend on help." (Jerry Rubin, DO IT)

TROGLYDYTE COMMUNITY By: Rayo

(The article is a projection from experience of a few people.)

A Loose Open Association (loa) is a community form suitable for vonuans who rely more upon seclusion than mobility.

An loa consists of two or more separate families living within a few miles of each other in an otherwise unpopulated area. A 'family' may be a lone individual, a couple, one or a few adults with small children, or a close cohesive band of any size.

Each family has its own vonuum (vonu home) where it lives most of the time. A vonuum may be a tent, hut, smial or other hidden structure. The vonuum's location is usually kept secret not only from outsiders but from other families in the loa. This avoids excessive concern about who might be an informer or simply careless. And, if the vonuum is ever molested, there won't be cause to suspect another family.

Gatherings are usually limited to two or three families at a time. Families who wish to get together agree on a meeting place, which is probably not close to any of their vonuums. Inexpensive rain shelters, bedding, cooking utensils and some goods may be stashed there so that gear need not be backpacked each time. A family may use a number of sites for get togethers with various people, including one outside the loa's territory for visitors from outside. Frequency of get togethers and amount of exchange is up to the individuals but with homes a mile or more apart, contact with another tribesman is almost always a treat, rarely an irritant as it often is when people live packed together.

Since the loa as a whole does very little there is rarely if ever a gathering of the 'tribe as a whole'. Any communication to all members is most easily made in writing. Each family has one or more drops (which may be at meeting spots) thru which messages and parcels may be relayed both to other members and the outside. A drop consists of some weather-and-animal-proof container, such as a wide-mouth steel drum with tight-fitting lid covered by a tarp hidden in brush.

Mail is received at the residential address of a friendly outsider, who leaves it in a drop near *er* home; or at a p.o. box. The loa may also have a telephone answering service or even a secure radio link to a telephone.

In a small loa all members may take turns going outside for mail and purchases. In a larger association, a few of the longer-time member-families perform this on a regular schedule.

The originating members decide on rules of association and 'territorial boundaries' of the loa as a whole. Some of our present customs ('rule' may be too strong a word):

We do not make fire, bright lights, loud noises or anything else apt to attract attention, within the territory.

We minimize motor vehicle movement into and out of the territory.

We do not divulge our location to outsiders nor invite them into the territory. (We are happy to have visitors but meet them outside.)

We divulge the identity of another member to an outsider only with that member's consent.

We tell each other about all artifacts discovered within the territory (to warn someone if *er* concealment is insufficient, or that there are strangers within the territory.)

New families join the loa only with the consent of all present members.

The bounds of a loa's territory is known only to the members. Members have no power to keep outsiders out. They simply remain invisible to anyone who enters not at their invitation.

What constitutes a family is up to each family. Within the loa, families may coalesce into larger subgroups or break up. Older children may build their own secret homes where they are vonu from their own parents and any would-be bullies as well as from outsiders. Thus a child can choose associates from all members instead of being dependent upon, and thus vulnerable to one or two adults.

Since wilderness vonu costs little, even fairly young children can be economically independent.

The greatest benefit of an loa, at least at first, is not internal exchange, but more efficient outside trade by pooling purchases, transportation and communication channels. Seldom-used equipment is shared.

An loa may begin as a seasonal gathering, most likely in Summer. As members build better shelters they remain in the area longer, some the year around.

To obtain money a member may work outside a few months a year at first, using a van for temporary shelter. In time *e* may develop an enterprise which exports an intangible (such as writing or computer programming) or a small specialty product.

HORSE NOMANDS IN PRESENT-DAY CALIFORNIA By: Eldorado

This report is fictionalized in respect to names, exact locations, current status, and sequence of events, but factual in terms of specific information and tips offered against the background of our experience.

We are horse nomads. Our ideal has been to combine the natural territorial range of the horse (an area about 100 miles in diameter) and its defense mechanism of fast flight over rather long distances to new grounds with the needs of people who would function as nomadic gatherers when operating on a subsistence level. When living more interdependently as spin-offs of the larger society, recreational and profitable uses of the horses and our general mobility serve as current fringe benefits.

We dwell at several seasonal bases and a larger number of very temporary squat-spots in an area of California having a great diversity of climate and elevation. Although containing areas of heavy population density, about 90% of our grounds are uninhabited. We are seeking to explore other areas, about 100 miles apart center-to-center, which form links in two chains – one running North-South, the other East-West – and providing stations in an underground railroad allowing us to move people and things really long distances in rather short times. We see one of these routes paralleling the U.S.-Mexico border and linking the Gulf and Pacific coasts, and the other linking West Coast locations. This implies our having some contacts with other like-groups and vonuans in general.

Moving thru 'Public Lands' has never been a big problem; perhaps in part due to our taking on protective coloration as needed and the ability to present plausible explanations. I cannot divulge how all that is done, but suffice [it] to say there seems to be a tendency to accept a small group of people on horseback as having some reason for being where ever they are found: bird-watchers, 'horse people', hunters, etc. Long stays are on private property belonging to friendly owners. I should emphasize we do encamp for long periods on one spot. However every effort is made to keep ourselves in a state of readiness and training for movement on very short notice. We can split and function as sub-groups or individuals, move to known areas where supplies are already stashed. We have a potential for

moving hundreds of pounds of goodies if need be, and this can be an advantage over foot-people, but horses require their logistics. Everything has its compensations.

We are a gregarious gang and like company. We need not conceal our camps as carefully as do some vonuans because we can scramble and be many miles away by the next morning. There is a certain strength in numbers — and a lot of fun. About 12 seems to be comfortable, but 20 or more would be a mob-scene.

When at a fixed base some of us live in camper-like units we have built which are capable of being hauled in a pick-up, on a utility trailer, or on an old horse-drawn wagon. Commercial equipment of any kind has been a problem and we have had to research and improvise our own.

As intermediate equipment and for use further out in the boonies we have some big tents and other gear suitable for a group living quite sumptuously while gypsying. Each individual allowing him to survive indefinitely alone on the trail.

In order to keep organizational structure at a minimum group ownership has been avoided. Each person owns their own horse, equipment, etc. Any property they may have acquired in that other society is not a group concern. Short-term cooperative ventures, trade-work and trade-use deals are common. At times the entire group has been involved in profit-making schemes. Discussion in each case determines who is to do what and what goods and services are worth. That amount is paid to each participant at a final accounting. The initiators of such projects usually act as their managers with the tacit consent of those involved. At the wind-up of the affair no more organization is needed.

In routine affairs we all act as teachers to one another (including children who are considered as small-size people). Knowledge along with the persuasive powers and energies of each person carry a certain amount of authority. Additionally we have councils in which someone may be selected to perform a certain job such as negotiating with a land owner or taking some money we all throw in the hat and shopping for needed supplies. There is no central authority. In the event of a person so conducting himself as to be obnoxious to others or to jeopardize the basic objectives of the group we can ask him to leave – and in [the] event he

won't, we will! New members may be discouraged by what appears to be authoritarianism. We reserve the right to protect ourselves, to set standards of capability for people, horses and equipment, to require our camping spots to be maintained, etc... We want to enjoy our mode of living. There is a great deal to be learned by a green-horn and this may involve some months of being instructed, managed, processed, cussed-at, before the newcomer stops being a nuisance to others.

We are very oriented to the idea of living naturally and of living close to nature. These motives seem to confuse people hung-up on current definitions of Liberal versus Conservative. We propose to live differently and therefore forsake old patterns. We propose to live INTENTIONALLY and not to be acted upon. Our survival demands exclusion of non-survival people. Boozers, dopers, those who haven't the determination to take care of themselves are not welcome. Most of us are into various physical-spiritual integration trips. Ages range from 2 to 50 with complete equality between men and women. Relationships are an individual matter, but two types are absolutely basic: that of the person to this planet and that of the individual to the group. Unlimited loyalty is required in both cases.

Some of us work at city jobs and commute. Several have broken out of that to work as independent contractors, but still have to travel. Incomes vary as do needs. The actual money needs within our system are very low, but some may be saving up for trips, projects, education, etc...We demand a great deal from our horses in appearance, usefulness, and in their capability of moving us many miles quickly. It's best to allocate about \$35 per month to each for its keep and then work backwards from that figure in two ways: swap, scrounge, bargain for horse feed and supplies to cut this cost; and also, put the critter to work to earn his keep. We have rented out horses, packed stuff for people, plowed up garden plots, hired out to motion picture companies, dragged logs out of the woods to be cut for firewood.

The TRAVELING HORSE as such as not been intentionally bred, nor his needs in equipment commercially produced in about 75 years. Potential horse vonuans can call on a vast amount of good information in books. Look into the very recent interest in 'Endurance Competition' and what is being learned there. Bum steers are available from 'cowboys', dealers, the proponents of one breed or another. Manufacturers are keen on gulling you into buying images wrought from old movies, TV, rodeos and other hokum

in the form of overweight saddles, clothes intended for saloon musicians, and gadgets. We have had to develop our own criteria drawing from several schools of thought. One general warning: Dismiss the Great American Wild West Tradition! It has no relevancy. I will illustrate some tips in the following fable:

Some of us took a 30-mile trip down a desert valley to a new canyonmouth camp site to check it out. It was arranged that an 'outsider' friend would meet us there for a visit, leaving from a different starting point and going by another route. Friend's short-legged horse walks about 4 ½ mph. It could trot at perhaps 7 ½ mph, but neither the horse's conformation, friend's ability, nor the saddle he uses encourage much of that. He claims his big saddle horn is "good for roping steers". What steers? He settles for a bone jarring job exhausting to both horse and rider. Both his route and ours cross a BLM fence which he detours adding an hour to his trip, but not accounting for his additional 3 hours later arrival in sore condition. Ours was a different sort of trip, interrupted by picnic and skinny-dipping at a spring, rest stops, investigating the candy potential of some cactus we found and goofing around. Our tall 'giraffes' walk easily at over 6 mph as they were chosen for ability. We can trot on smooth level stretches getting maximum mileage for effort expended. We get off to walk several times – which we can do as our feet are not crammed into point-toed high-heeled boots suited to the Tijuana cab driver. And about that BLM fence: some bedding was draped over it (an old military trick for going over entanglements) and we just jumped over it.

Don't expect horses to live off the land in most of the country. While moving about dry green grass, weeds and such may serve as 'filler', but we always carry along or have stashed concentrated feeds such as pellets and grain. A few days supply can be carried as it is light and compact. Know your area and map out places where you can buy supplies. Locate shortcuts, rails which may cross private lands, but where trespass is not involved. In most states the trespass laws do not preclude your traveling over private land per se. Rather, trespass must involve your doing damage or intending to do damage by entering private property.

Our present goals include acquiring a few more people fostering other similar groups, internalizing education for children by setting up some school activities. We may use this school later as an outer-facing and contact point with the other society by taking in carefully selected people (of what ever age) for tuitions. Probably most of us have a strong sense of separateness from the Silly Society and now want to develop the positive aspects of this Apartheid situation by acquiring skills and cultivating talents which will better express our own culture. In this vein when I'm asked "what kind of people do you want?", the answers are: minstrels, singers, dancing girls, troubadours, elves and poets. We admit to a certain theatricality; it may be our strength – and a lot of fun!

SMUMANS: THE SUPER HOBOS By: Rayo

'Smum' stands for Seclusion and Mobility Using Multiplicity. Smum has some features of and intergrades with troglodyte, foot-nomad, urban anonymity, and vehicle-nomads ways, but is [it] differs in overall living pattern and equipment use. Smum has similarities to traditional ways as diverse as hobos, eskimos, fur trappers with several overhight [over night?] cabins, and wealthy families with several 'conventional' houses.

Many smum life-styles are possible but all involve migration among various abodes. The abodes are usually simple, inexpensive, semipermanent and widely separated. A number of towns of a region are used, in succession, as trading outposts. Smum offers, in part the wide-ranging mobility and anonymity of vehicle nomadism with the privacy and safety of troglodysm. While smum is complicated to describe (at least with conventional concepts), smum is easier to implement than any other life-style I presently know of which offers comparable vonu. Smum is made economical by the low cost of plastic film and second-hand utensils.

A smum family migrates between its abodes, probably seasonally. Less often an abode is moved to a new site within the same area, or phased out in favor of a new abode developed elsewhere.

Most of the abodes are located at least a quarter-mile and not more than ten miles from a road. The road is preferably either a highway, or a trail without habitation along it or at its intersection with the highway. Most abodes cannot be reached by motor vehicles. There are several hiking routes from each abode to one or more such roads. Each route reaches the road at a different place and at a place out of sight of residences. At least one route from each abode ends in a parking spot which is out of sight of the road and rarely used – suitable for unloading supplies.

A few hundred yards into the brush from each parking spot is a stash for low-value supplies awaiting backpacking to the abode. The supplies are stored in drums for protection from animals and weather. Hiking routes are irregular and cannot be followed by someone not familiar with them. Each route is used only a few times a year so it doesn't receive much wear.

In Siskiyou region, abode sites are selected so that highway distance between is typically 100 miles. This separation is determined be the distance between major trade towns and the living patterns of conventional people – people rarely go a hundred miles to work, shop or socialize. Overland hiking distance between abodes is less – typically 30 to 40 miles – the abodes all lying within the same mountain range.

A family has no single trading outpost. From each abode a different town or, better yet, two or three in alternation are used for shopping, receiving forwarded mail, and perhaps temporary employment. The towns so used are fairly large – at least 5,000 people within shopping range. And they are located on major highways and thus accustomed to many visitors.

After living at one abode a few months and making trips alternately to the nearest suitable towns (which preferably lie in opposite directions) the family moves to another abode, a hundred miles away, and makes trips to different towns. And so forth. They do not return to the first abode and the corresponding trading outposts until a year has passed. If a family has six abodes, 12 trading towns, and makes trips to town twice a month, one member is in each town twice a year, not often enough to be distinguishable from the many thousand travelers who stop briefly.

The family is probably not limited to a fixed schedule or route. If they encounter trouble in one town they do not return to that area for several years, meanwhile developing a new abode elsewhere. In an emergency they can hike overland between abodes without using roads or going into populated areas.

All possessions of a smum family have one or more of the following characteristics: inexpensive, expendable, small, used seasonally. Inexpensive items are duplicated and left at each abode. These might include polyethylene film and rope for rigging tents, bedding, cooking stove, utensils, extra clothes, and drums for storage while abode is not occupied. Bedding, clothes and utensils are scavenged at dumps or purchased second hand. Total cost of stationary items at a warm-weather abode is probably less than \$50. Expendable supplies include food staples,

soap, writing paper, kerosene and propane. These are ordinarily left at an abode until consumed. Some small but valuable items move with the family; such things as watch, transistor radio, binoculars, handgun, radiation detector, camera, medical kit, sewing kit, and often-used reference books. Seasonal items are grouped according to use at specific abodes; these include most books, tools and construction materials.

Each abode is somewhat specialized for the activities performed there and the season that it is used. Abode might include: Summer camp: This may be more remote than other abodes since there will usually not be snow and swollen rivers to hinder access. If foraging and vonu horticulture are accomplished in that area, books, tools, and preservation equipment are stored there. A plastic tent and mosquito netting are sufficient shelter.

Winter abode: This may be a semi-underground structure, or a large foam hut plus a plastic tent. Since there is little warm working space much reading and writing are done there. Most books are stored there.

Electric abode: A small generator, probably hydroelectric, powers a sewing machine, electronic equipment, or any other gear requiring electricity but not bulky imports. Relevant books and materials are stored there.

'Edge place': This is for work involving bulky imported materials such as carpentry, and is the one abode accessible to vehicles. Major work on any vehicles is performed there; also any work which because of space required, noise or smells is not easily vonued. Edge place is most likely on fairly secluded private land leased from a friendly landowner. An old van or house trailer may be parked there to provide sheltered work and storage space. Edge place is much less vonu than other abodes so work requiring much privacy is not performed there. And any family members especially threatened, such as slave-age children during that season, remain elsewhere.

A minimally-furnished van may be used for shelter if one or more members occasionally go into that society to earn money. When not in use it is probably parked on private land, perhaps at edge place.

A friend who may be outside the Siskiyou region provides a permanent mailing address. The friend accumulates mail, bundles it, and

sends it as a parcel, as directed. If possible the family makes arrangements with trustworthy local people in each town to receive U.P. parcels; if not the parcels come general delivery.

A legal home address for drivers license and vehicle registration, if needed, is probably arranged in a large city outside the region, and separate from the mailing address.

Means of transportation vary. One smuman may not have any vehicle. E hitchhikes for mail and light supplies, also for migration between abodes. E hires a van or pickup, preferably a transient, to haul heavier supplies.

Another smuman may use a motorcycle for all transport – this will be a bike with enough power for the highway yet light enough to manhandle into hiding places – perhaps a 250cc trail bike.

Still another may have a van or camper for hauling supplies as well as for work excursions. *E* will also use a motorbike or else hitch rides, since places suitable for long-time parking will seldom be convenient to unloading spots.

Smumans, like other vonuans, obtain money in ways which minimize time and involvement with the Servile Society. One may have a line of special services or products *e* sells thru merchants in the towns *e* visits. Another may have a mail-order enterprise. Someone with a highly-paid skill may journey to a distant city for temporary employment.

But most, at least at first, will probably depend on day labor in nearby towns and seasonal crop work. Altho this is low paying, a smuman's expenses can be very low. So not many day's work are needed.

An individual or family without slave-age children can be flexible about outside employment — working together or separately at any time of the year. A family with children is more constrained. Perhaps during the school year the children remain at a secluded site, then during Summer the whole family does crop work and any other activities involving that society.

If asked for address by employers or bludg, a smuman gives er legal home address. If asked for local address e says e is visited by some friends (location vaguely defined).

A smuman can be opener with outsiders than can be a more-stationary wilderness-vonuan. In some instances e may be able to socialize with local non-vonuans. E can even say to friends e is camping 'back in the woods', knowing e will have moved on to other woods before the word gets very far.

For a smuman, the whole Siskiyou region becomes, in a sense, a single widely-dispersed city of several hundred thousand people. Smum offers much of the anonymity of metropolis without the pollution or nuclear danger. Assets are dispersed and cannot be destroyed by a single misfortune.

Comparing smum to full-time van living: Most time is spent in or around abodes which are concealed away from roads in rugged, brushy areas rarely if ever penetrated. With our van the greatest mean time to harassment (mth) we have achieved is one or two years. Whereas with a small tent we can easily achieve 20 years mth; with more work and care, 200 years mth. (Interpretation: if there are 200 such camps, an average of one a year will be discovered.) This is while a camp is set up; torn down and stuffed in drums under bushes chance of discovery is even lower. We have had enough stash tents in enough situations to have confidence in the 20 year figure. One year mth is adequate for someone not especially threatened who wants peace and quiet. It is not sufficient for slave-age children, someone without 'acceptable' ID, or for most kinds of alternate-economy enterprises.

A serious disadvantage of smum for some: activities must be accomplished at certain places and in certain seasons, rather than when one is in the mood. Planning and bookkeeping are essential. Life is more structured than with everything in one place, but the structure is chosen by oneself, not imposed by outsiders.

One might initiate a smum life-style by exploring a region on foot and hitchhiking, using light-weight camping gear, then gradually build equipment and supplies at the most desirable spots. Or a van nomad might develop a string of vehicle squat-spots; then use these as bases for scouting. On the other hand, from a smum life-style one can become, say, a troglodyte by further developing one abode and phasing out the others.

Like any new life-style, smum should be begun when one is not in immediate danger --- when one has time to experiment and can survive a few mistakes.

WINTER IN THE WOODS By: WJP

My love for the vonu way of life has its origins back in Boy Scouts. I was very lucky in having a unit with leaders that were as much stoked on getting out in the wilderness as they were on the usual meritbadge-competition crap. I never liked the hiking but getting there made it all worth it. Most of my 'education' came on those hikes and with friends later as we continued the tradition. As so many have found, you can't live a city life or even a farm life and then suddenly decide to go vonuan immediately. Lessons must be lived and learned.

It took me a year in Vietnam to learn the value of my legs. The summer after I got out I got together with an old friend and a couple we knew and we set up a small camp near Butte Meadows (about 40 miles from Chico, California) on land owned by Diamond International (lumber company). We spent several weekends scouting out a spot that would: 1) supply running water nearby, 2) be open enough to let the sun in but be forested all around, and 3) be as isolated as possible from the dirt roads nearby. We settled on a tiny meadow near a creek, accessible to the truck and VW we would use to bring in supplies, and yet far enough from the dirt roads to allow fair security from detection.

We built a sweat lodge out of willows covered with a tarp and dirt and even dammed up part of the creek to swim in. We ate mostly gov't food commodities and had a small wood stove to cook on. We drank fresh creek water; there was nothing between us and the several feeder springs but a few miles of 20-year-ago logged forest and unraped meadows, as we soon learned on extended walks. After two months we were discovered. It seems that Diamond International employs a duffer to patrol their land in a Toyota jeep and run off any intruders. He said he had been by many times but this time (soon after a shower) he noticed tire tracks leaving the main dirt road and decided to follow them. He couldn't believe his eyes, said it was the cleanest camp he'd ever seen, said he'd like to let us stay but that he couldn't cause of his job, gave us "a few" days to be gone.

I got permission to live on private land near there and we put up a small shack out of lumber we scrounged from old deserted cabins in the area. Most of the wood was sawmill oak which had been cut right in that area over 50 years ago. We roofed it with old corrugated tin found also on old shacks.

The next summer (after a city winter) I spent at the shack. People would come up and visit, sometimes for days, and I did a lot of walking and reading and looking at stars and thinking. Ah, the hunters came without warning and scared the piss out of me at first. But soon I realized that the deer and I stood a better chance with them than the bobcats, mt lions, etc., so I just sat in my shack and waited for them to get it out of their systems for one more year. After the second weekend of the season I heard nary a shot.

I spent the winter (last winter) there, doing a bit of reading and writing and a lot of woodchopping. This was when I learned of the growing sport of snowmobiling. They never came up to my place but the noise could be heard for over a mile. It was disturbing at first, but it soon got to be a trip to sit outside and watch them zoom along, staying mostly on the roads, making all kinds of powerful sounds, going nowhere, just going asserting their existence. They only came on the sunny weekends and once at a time that must have been semester break for the college down in Chico. I never bothered them and they never really bothered me. We were just finding different answers to the same questions.

We all have such a fear of spending time alone and especially away from where we can get help fast. I tried not to scare myself and knew that if I could just get up there, snowed in, with the essentials, that I would make it. What really did it was that, because of my experiences in 'Nam, I was no longer afraid to die, or afraid to let go of the known. Surely, I did not want to die; I did all the research I could to make me more prepared for the winter, but I was not caught up with fear, like some of my friends – when they heard what I was planning, all they could say was 'what if' this and 'what if' that; they couldn't see that maybe a special experience is worth the uncertainty it entails.

I got my water from the creek, my wood from downed timber, and my light from kerosene lamps; I ground my flour on a Corona mill; I had two squirrels, a gopher, a few mice, 3 raccoons, and several coyotes for neighbors; I found I didn't need shit-food and sugar and movies and TV

and cars and steaks and new clothes and lots of money and a successful career and weekly sex and grass and booze and mescaline and acid and flush toilets and electricity and hot showers after all, but if I hadn't had them I probably wouldn't know that I didn't need them.

It was a short, warm winter, only lasting a little over three months (at 4,000 ft) and it was a glorious Spring. I saw so much more of life, because I was really looking now, and not blindly caught up in keeping busy. I got an unskilled job pretty easily and worked this summer, getting my overdue dental work done (I had cracked two teeth eating raw wheat kernels, but had only three small cavities) and preparing for this winter. I have permission to keep an eye on a Boy Scout Camp near my shack (the lodge was broken into and ransacked last winter, by snowmobilers, I presume).

My main staples will be wheat and brown rice, with some dried vegetables, flavored soy protein and a little meat as supplements. I got along nicely with very little meat the last two years and plan to continue. Here, as anywhere, you have to get out and scout around and do what you have to in order to find out what it is you really want to do. Peace to you and yours, hi to Rayo and Dr g, until next spring, WJP

ETHICAL LAND USE By: Rayo

As a vonuist my policy is non-coercion – live and let live. So long as another human does not do or threaten violence, I do not intentionally interfere with that person or with artifacts he creates or acquires with the consent of the one who creates.

Artifacts include structures upon or under land – a home, factory or garden. But naturally-occurring land itself is not created by the deliberate efforts of any being. So what claims to land or uses of land may I properly make? I will begin by scrutinizing some traditional answers to this question.

One doctrine holds that land belongs to the first person who uses it (or discovers it and claims it). Some people assert that this is the only truly moral doctrine – i.e., consistent with non-coercion. But actually it is arbitrary. How does a person who first gathers wild berries in a particular valley gain a right to exclude or collect rent from others who wish to gather berries or plant turnips? *E* can claim the particular berries *e* gathered. But *er* action does not create more berries nor trees nor soil. Likewise, someone who grows a crop may claim the harvest as well as 'improvements' to the land such as clearing and terracing (so long as these improvements endure) but does not thereby gain any right to interfere with others who make nonconflicting uses.

This doctrine is not only arbitrary in theory but capricious if not unworkable in practice. Very little if any land in the world today is used with the consent of first users. Typically, a tract of forest is 'owned' by a lumber company which bought it from a government 50 years ago, which seized it from an Indian tribe 150 years ago, which seized it from another tribe 500 years ago, which seized it from still another tribe 2000 years ago. Further investigations may show that the land was held by still another tribe 10,000 years ago. And so forth.

Under 'first-user' doctrine most of North America would belong, not to 'the Indians', but to just a FEW Indians. There is archeologic [archeological] evidence of at least five different waves of immigrants

across the Bering Strait thousands of years apart. In all probability, descendants of the first group multiplied and used most of the continent; subsequent comers were 'trespassers'.

In many cases the original tribes have vanished – destroyed by enemies, epidemics, or hardships endured upon being forced out by 'their' lands by a stronger tribe. Individual survivors scattered among other tribes and intermarried. Determining original users and their closest surviving kin, after tens of thousands of years, would be extremely difficult to say the least. In a society where 'first user doctrine' was consistently applied, there would be as many archeologists and paleo-geneticists as there are lawyers today.

This is not to deny that great wrongs were inflicted upon many Indians by Europeans (principally the U.S. government) or that restitution should be made. It is to deny that first-user doctrine provides a proper way of deciding who should own what today. Being dispossessed of land was, in many instances, the least of the damages inflicted: Indians were also murdered and their children were, and ARE forced into state schools.

A second doctrine asserts that land belongs to the first person able to use it 'intensively' – i.e., cover it with improvements. By this doctrine a farmer has the right to seize land from a tribe of foragers.

But this doctrine is as arbitrary as the first and raises such questions as, What constitutes an 'intense' use? May a government seize ('condemn') the farmer's fields to build an airport?

This doctrine is most applicable to 'built up' areas – houses and factories – where the 'improvements' (artifacts) may be more valuable than the land. It isn't relevant to wilderness land.

A third doctrine of land ownership asserts that, since no individual created land, land is owned by 'society as a whole' or 'all the people'. But this merely compounds the absurdity. If NO person created land, how did ALL people do so?

In practice, since little if anything is done with the unanimous consent of all people, some ruling group attempts to control land in the name of 'the people.' This leads to the fourth doctrine: sovereign control of all land belongs to governments, either by 'devine [divine] right' (in the case of absolute monarchs) or by the (equally mystical) 'will of the people,' Governments then delegate plots of land to favored subjects.

This is the least tenable doctrine of all: a fictitious title is, in essence, transferred to a government by an equally fictitious contract. Furthermore, since most governments on earth are essentially monster criminal conspiracies – guilty of wholesale murder and robbery, any property such a government might otherwise claim, is forfeit as restitution to its victims. Unlike other land users, a government does not even have a moral claim to structures it may put on land.

Since a government has no moral right to land, no one has a moral claim by virtue of assignment by government – i.e., 'legal title'.

My land-use ethics: No one created naturally-occurring land. Therefore no one owns land per se. Any 'rights' pertain, not to the land itself, but to SPECIFIC USES of land. Therefore, morally, I MAY USE LAND IN ANY WAY WHICH DOES NOT SERIOUSLY INTERFERE WITH OTHER USES ALREADY BEING MADE, EXCEPT AS I MAY OTHERWISE AGREE.

The exception is important. It includes renting, leasing, caretaking or being a guest. If I go onto some land at the invitation of another, I thereby recognize his right to control my use of that land. This is true regardless of what 'right' e may have to the land - i.e., whether or not e has 'legal title', whether or not e dispossessed earlier users, or whatever.

This doctrine is not without elements of arbitrariness. For example, what constitutes 'serious interference'? And in [the] event of a dispute who decides? But all concepts involving human action have 'boundary problems'.

Broad categories of uses to consider: (A) Relatively 'visible' uses of land such as conventional construction, farming, logging, mining and road building. (B) Relatively vonu uses such as hiking, foraging, camping, goldpanning and hidden construction.

The visible uses are vulnerable to organized predators (sometimes to unorganized ones as well). Visible users can operate only with the consent

of such predators. To minimize my involvement with criminal organizations I must minimize my visibility including visible uses of land.

Situations of possible conflict: (1) vonu use concurrent with visible use; (2) two or more possible vonu uses.

Example of the first: Suppose I wish to build a concealed home on land 'owned' and periodically cut over by a lumber company. I do not recognize the company's ownership of the land per se; however I respect the use they are already making of it – to do otherwise would involve me in power games of that society. So I do not attempt to cut and sell commercial-size timer. Nor do I, without provocation, interfere with the company's operation.

To the contrary, I am probably mildly beneficial to the company, while remaining independent of it and (most likely) unknown to it. I eat porcupines which gnaw trees. I try to put out any fires started by lightning (as well as being very careful with any fires of my own). I use only dead or crowded-out-and-dying trees for my construction – primarily to avoid visible alteration, but this also reduces fire hazard and speeds growth of remaining trees. I may make minor repairs to access roads. In a sense I become a kind of benevolent wildlife; perhaps as desirable (from the point of view of the company) as a bird which eats pine beetles, but even more 'uncontrollable'.

The lumber company's use may also benefit me. An area they cut may, after a few years, be lush with berries and game. After a few more years it will be a dense thicket of young trees and brush — an ideal vonu homesite. And their logging trails may be useful for occasional access to that society.

I try to be beneficial or, at least, non-injurious, because vonu is always relative. The company could, at great expense, hunt me down, chase me out, or at least force me to take measures which would seriously inconvenience me.

The company may be completely unaware of my presence. Or they may suspect that someone is using the land but not know who, when or where (weekend recreationists may also use it). So long as I am benign they are well advised not to pursue the matter further. 'Declaring war' on a vonuan would be highly unprofitable. They could bring greater forces to bear – perhaps many men with dogs and helicopters – but they must pay these forces. And the property of mine which they could seize – if they could find it – is of little value to them. Whereas they have large amounts of valuable and vulnerable property – equipment, roads and the trees themselves – all out in the open. While I will not deliberately initiate violence I will happily retaliate. If someone deliberately interferes with my uses, I no longer feel obligated to respect *er* uses.

This analysis applies also to land claimed by a government agency, except that the government (unlike most lumber companies) is a coercive organization and so does not have a clear claim to 'improvements' it may make.

Might it not be easier for me to get the company's permission to camp on their land, in return for caretaking? Then I could dispense with some of my security precautions. But to the degree that I become involved with visible users of land I partake of their vulnerability. What effect might my occupancy have on their insurance? If I fell and hurt myself could I sue? If I have school-age children, could the company be charged with contributing to the delinquency of minors? And, if they know where I am, will they tell others?

The usual experiences of vonuans with large companies: If one asks permission to squat, or even rent, *e* will be turned down. But if one goes ahead and does it without asking, and is later discovered, at most *e* will be told to move, quite often *e* is allowed to remain.

The second type of situation which could result in conflict: two or more unrelated vonuans attempt to use the same land. There is so much relatively-unused land compared to the number of vonuans that I don't think this will be much of a problem in the foreseeable future, except possibly for those who hope to obtain all their food by hunting and foraging. In [the] Siskiyou region alone there is about 30,000 square miles of uninhabited forest, brushland and high desert – enough to provide 10,000 groups with three square miles each. Nevertheless I will consider some possible cases.

If the vonuans are of the same subculture they will probably have conventions regarding land use, including pre-agreed-upon arbitrators to resolve any disputes. They may have secret signs – intelligible only to others of their kind – meaning, "This land is already being used for _____. No trespassing for conflicting uses."

Another possibility: life-styles may be so different that the vonuans, if skilled, rarely or even encounter each other or their artifacts. If they do, they will be inclined to leave alone, so that they will be left alone.

I cannot predict the techniques which vonuans may use in the future nor the conventions regarding property which may develop. But, unlike visible people, avoiding conflict by diversifying uses will usually be more advantageous than fighting over who shall make a particular use. Most forms of combat increase the visibility of the combatants (e.g., explosives, stockades) and their vulnerability to third parties, and so are not compatable [compatible] with vonu.

This doctrine of land use is similar to the conventions of other life. Many species are territorial: bears have territories; humming birds have territories. But territorial defense is directed mainly against unrelated members of the same species – i.e., individuals attempting to make similar uses. A bear does not attempt to keep humming birds out of its territory, or vice versa. The tendency of life is to diversity – to minimize conflict.

ROOTING OUT THE OUTPOSTS By: Rayo

("It's hard to fight an enemy who has outposts in your head." Attributed to Sally Kempton)

The book CRUSOE OF LONESOME LAKE relates how Ralph Edwards built a homestead in a remote, isolated area of British Columbia. Ralph performed incredible feats such as packing tools and supplies, including large machine parts, 50 miles from the nearest settlement over a precipitous trail.

Ralph had no need to question the world-views of the culture in which he had grown up. Or did he?

His homestead was half-done when he learned of World War I. Leaving the fruits of his hard labors to the bears, mice and mildew, he rushed off and enlisted in the U.S. Army. He spent precious time fighting the war "to end wars" and "make the world safe for democracy." And if some equally patriotic German had aimed his way, Ralph's dreams would never have materialized.

On the other hand, I heard of someone able to speak learnedly about the evils and absurdities of the State, who allowed himself to get drafted and shipped to Vietnam – and is now a basket-case in a VA hospital.

Neither ideas nor actions alone are sufficient. Achieving vonu requires both — and integration of theory and practice. And neither ideas nor actions are 'primary'. More effective actions depend on a better understanding of the world. And better ideas spring from experience gained doing.

I and probably you were heavily indoctrinated during our early years, not only by State schools, but by attitudes expressed by parents and playmates, and even more by having to live as virtual slaves – most people rationalize that whatever seems unavoidable is really for the best.

As one grows aware of that society's contradictions one becomes more skeptical. Nevertheless, most people criticize only activities they are personally familiar with, and assume that other State functions are proper.

Such a person may say, "I grant that _____ is wrong. But what if the government didn't provide highways, schools, postal service, national defense, pollution control, food and drug regulation, banking regulations, welfare, police protection..." and so forth.

Answering such questions will not directly affect the policies of government; e.g., proving that there would be better transportation in the absence of coercive financing and control will not cause highway departments, state cops, licensing or gasoline taxes to go away. But one benefits psychologically from knowing that (1) coercive methods are not constructive and (2) the achievement of vonu by individuals indirectly benefits others as well.

There isn't space here to refute the myths of State. Nor do I know of many readily-available books which do. It is up to each reader to identify and remove any 'outposts of the State' from *er* own mind.*

I suggest selecting ONE activity of government you believe is justified and examining it critically. Ask yourself: Has that activity always been performed by coercive means? Or have there been times and places where it was voluntarily accomplished? Are the interpretations taught in school justified? Or are they simply part of the indoctrination? Do government programs really accomplish what they claim? If government (or its corporate/union vassels [vassals]) stopped doing this, and did not interfere with others trying to do it, how might it be done by non-violent means? Here are some fallacies to look for in arguments favoring coercion:

Spurious cause and effect. Example: "Living conditions are better in America than in Russia so our government must be good." COUNTER: Russia today is more prosperous than was America in 1800, so should we praise Brezhnev and damn Jefferson? Actually, living conditions depend on many factors including climate, work ethics, market size, and time that industrial development has been under way. American living conditions improved most rapidly during the late 19th century when government was relatively little, which suggests that relative prosperity is IN SPITE OF, not because of, government.

Paternalism: "Most people are not competent to choose food, drugs, doctors, automobiles, entertainment..." etc. COUNTER: If someone isn't competent to run *er* own affairs in which *e* has the greatest interest and

knowledge, how is *e* competent to select leaders to try and run other people's lives?

Overlooking indirect effects: Example: "Look at the marvelous things the Space Program built." COUNTER: What things might people have done with these same resources if government had not appropriated them?

Mistaking a different servitude for liberty. Example: "Before child labor laws, under laissez faire, children worked long hours in factories." COUNTER: Children did NOT possess laissez faire, they were legally the chattels of their parents who could and often did force them to work against their wills, and took their pay. Children who ran away and were found, were returned by the police. Child labor laws did not end child slavery; they merely altered the powers of the various masters: less powers to parents, more to bureaucrats. If really free, a child could seek factory work or not as e wished.

Mistaking license to aggress for liberty. Example: "Factories would pollute (more) if it weren't for government controls." COUNTER: The polluter is the aggressor: *e* dumps *er* wastes into OTHER PEOPLE's air and water. It was state laws, which protected industries from the just wrath of their victims, that made possible large-scale pollution in the first place.

Confusing the effects of intervention with the effects of liberty. Example: "Free, unregulated competition leads to monopolies." COUNTER: The effect of free competition has been to DECENTRALIZE industry; the 'old guard' industrialists FAVORED government regulation, to REDUCE competition, which is the effect it has had. (Kolko, THE TRIUMPH OF CONSERVATISM)

Attributing mystical capabilities to government. Example: "Who would provide highways if the government didn't?" COUNTER: Highways are built by PEOPLE and the machines they operate.

It isn't possible nor necessary to predict in detail what would happen if government or the monopolies it fosters ceased such and such activity. If, for example, the State was no longer able to collect gasoline taxes and license fees or dictate what kinds of vehicles could be built and operated, the following are all possibilities: local road-repair cooperatives; private, competitive expressways, financed by tolls or by franchising businesses at

rest stops; various mass-transit systems; better all-terrain vehicles for travel on unimproved roads; cheaper, easier-to-operate aircraft; better communication which reduces the need for travel; more decentralized industry which reduces freight. No one can predict to what extent each of these would develop; what actually happens would depend on the ingenuity and independent decisions of millions of people. But one can predict that people will find ways to travel and transport.

What highways were built, would be built because there were people willing to pay for using them, rather than for political reasons. And I don't think there would be the petty harassment by police. (How many people would pay for THAT?)

This is not an appeal for 'anarchy'. Trying to eradicate or discourage all power-seekers is as futile as trying to kill all flies and mosquitos. What is important is dispelling any notion that one owes anything to flies or mosquitos – or governments.

*If any "what if the government didn't..." question bothers you, write me, enclose a stamped, self-addressed envelope, and I will answer it to refer you to a source of further information. (See p. 120)

SPECIAL INFORMATION SOURCES

Here are some newsletters, magazines, directories, book publishers and other organizations which often have information of use to vonuans. Most of these are not found in libraries or bookstores.

Most of these sources are NOT primarily concerned with vonu. Some vonu newsletters and information nets are not listed here. To contact the latter see "How to meet other vonuans." Rather than play critic I've written only brief descriptions. I recommend sending for samples. The price listed here is for one copy postpaid unless otherwise indicated. A question mark indicates that I'm not sure of the price. For items costing \$1 or more I've estimated words per cent. Many of these are small, low-budget operations and do not give free samples.

Thanks to several people for leads. I'll appreciate information on sources I've missed.

A is A Newsletter, Mega 9730 Hyne Road, Brighton, Mich. 48116. Reports on the 'libertarian movement'. Descriptions of 688 publications, groups and individuals; mostly anti-establishment politicos from Conservatives to anarchists; some alternate life-style groups. 50¢; annual directory \$2 (130 words/¢).

Abode Hacienda, Route 3 box 517, Glendale Ariz. 85301. Outdoor, para-military and some political books. Mail order. Catalog free?

Akwesasne Notes, Mohawk Nation via Rooseveltown, NY 13683. Large newspaper by and about native Americans – news stories, expose, history, political protest. 60¢.

Alternate Sources of Energy, Donald Marier, Route 1 Box 368, Minong, Wisc. 54859. Magazine about wind, solar, hydro, wave, methane power. Some how-to-do articles. 40¢?

Alternatives Journal, Box 36604, Los Angeles, CA 90036. Newsletter about intentional communities and group marriage. 25¢?

B.C. Access Catalogue, c/o C. Grove, Station G, Box 6424, Vancouver 8, B.C. Canada. Local shops, groups, people, institutions. \$2. (500 words/¢)

Communities, c/o Twin Oaks, Box 426, Louisa, VA 23093. Magazine about various intentional communities and communes. Merger of Modern Utopian, Communitarian and Communitas. \$1 (400 words/\$\psi\$)

Camper Coachman, Griffin Publications, 10148 Riverside Dr., North Hollywood, CA 91602. Also at some newstands. Magazine mostly about new, commercially-built campers and trucks. 50¢

Canadian Whole Earth Almanac, 341 Bloor St. West, Toronto, Canada. Issues on healing, crafts, shelters, food. \$3 (430 words/¢)

Chinook Centrex, 4312 SE Stark, Portland, OR 97215. Annotated directory of stores, agencies, and groups around Portland. \$1.25 (1100 words/¢)

Equality, 6 Frankfort am Main, Postfach 3413, West Germany. Publishes unedited material from subscribers as a free-expression forum for utopians, communists, libertarians, etc. Published in English, German, French and Italian. Contribution.

E.S.P. Directory, Al Fry, 879 Park Ave., Perris, Califo. 92370. Addresses of many occult, metaphysical, mystery, mind improvement, alternate life-styles, extra sensory, 'flying saucer' etc. groups and publications. 50¢

Foundation Journal, 85 East Geranium Ave., St. Paul, Min. 55117. Somewhat like Whole Earth Catalog. No recent information

Fur, Fish and Game, 2878 E. Main St., Columbus, Ohio 43209. Outdoor magazine with many classified ads for hunting, trapping and camping equipment, buyers and sellers of herbs, etc. Also published books on hunting and trapping. Available at some newstands. 35¢?

The Green Egg, Church of All Worlds, Box 2953, St. Louis, MO 63130. Neo-pagan religion inspired by STRANGER IN A STRANGE LAND. Contact newsletter for 'non-conformists' of many kinds including pagans, anarchists and witches. 75¢

The Green Revolution, Route 1 Box 129, Freeland, MD 21053. Published by Heathcote Intentional Community. Newsletter about doings there and at other communities, and how-to-do info for neo-homesteaders. Oldest surviving alternative life-styles zine. 35¢

International Harry Schultz Letter, Economic Research Corporation, P.O. Box 45, Rheinfelder 4310, Switzerland. Very expensive newsletter which advises international investors and movers. \$7 (15 words/¢)

International Maritime Legal Research, P.O. Box 4022 Station E, 1723 Broadway, Toledo, Ohio 43609. Recruiting people to occupy and start a new country on Minerva Reefs in South Pacific. Send stamped envelope for information.

Invictus, Box 85429, Hollywood, CA 90072. Theoretical philosophy journal with viewpoints ranging from anarcho-capitalist to Objectivist. Sometimes vonuist news stories. 75¢

Libertarian Connection, Lisa Dawn, Box 90913 Worldway Postal, Los Angeles, CA, 90009. Publishes what subscribers send in on mimeo stencils. Contacts and discussion for anarchists, vonuists, black-marketeers, etc.

Articles on alternate money-making schemes, life prolongation, warning systems, placer mining, futurology. Much ideological debate. Special sample issue 25¢.

Lifestyle, Box 1, Unionville, Ohio 44088. Split-off from Mother Earth News with articles on intentional communities, foraging, cheap shelter. \$1.35? (1000 words/¢?)

Liveaboard, Paul Doerr, Box 1444, Vallejo, CA 94590. Publishes letters from people living aboard small boats. (Also publishes Pioneer.) 40¢

Minerva Office of Information, 426 E. Washington, Orange, CA 92666. Group attempting to found a new country on Minerva Reefs in the South Pacific.

The Mother Earth News, Box 38, Madison, Ohio 44057. Much how-to-do and where-to-get info for small farmers and neo-homesteaders. Also sells many books on farming and outdoor living. \$1.35 (1100 words/¢)

New Earth Catalog, 526 O'Farrell, Dept. 119, San Francisco, CA 94102. Similar to Whole Earth Catalog. No recent info on it. First issue \$3.50 (150 words/¢)

Normount Technical Publications, P.O. Drawer N-2, Wickenburg, Ariz. 85358. Reprints military books on weapon maintenance, survival, guerrilla warfare. Catalog free.

Other Scenes/Nomads, P.O. Box 45, Amsterdam, Nieuwendom, Holland. "The only truly international magazine of the counter-culture will report on the nomadic life from Europe." I haven't seen. "Few issues/\$1"

Peace Plans, J.M. Zube, Wilshire St., Berrima, NSW 2577, Australia. Many schemes for achieving peace and freedom reprinted from many sources. Most are political but some are vonuist. 50¢?

People's Yellow Pages, 351 Broadway, Cambridge, Mass. 02139. Protest groups and sources, mostly local. \$1

Pioneer, Paul Doerr, Box 1444, Vallejo, CA 94590. Suggestions for outdoor adventure, survival, underground homes. Brief news items and book reviews. Some politics. Newsletter. 40¢

Preform-Inform (or Pre-in-Form). Name changed to Vonulife, May 71.

Prospects, Swiss Bank Corporation, 15 Nassau St., New York 10005. Newsletter giving general economic news about Switzerland and Swiss banking. Not a how-to-do. Free upon request.

Puget Sound Access, Box 15301 Wedgewood Station, Seattle, Wash 98111. Directory of local sources. I haven't seen. \$1.50 Rationalist Church of America; Box 1059, Milwaukee, Wisc. 53201. Sells alternate holiday cards. Send stamped envelope for info.

Santa Monica Organic Garden and Nutrition Club Bulletin, 844 Fifth St., Apt. 1, Santa Monica, CA 90403. Heterodox health and gardening newsletter. 10¢

Security World Products Directory, 2639 S. La Cienega Blvd., Los Angeles, CA 90034. Burglar alarms and other warning devices. I haven't seen. \$3 "129 pages"

Shelter Publications, Box 279, Bolinas, CA 94924. Publiashed DOMEBOOK 2 and SMART BUT NOT WISE. Book on all kinds of handbuilt shelters announced for 1973. Send stamped envelope for info.

Tax Talk, War Tax Resistance, 912 31st Street, Kansas City, Mo 64109. News about tax resistance activities. Some how-to-do suggestions. 25¢?

Ticonderoga Dispatch, c/o James C. Jones, 11123 St. Lawrence Ave., Chicago, Ill. 60628. Local bulletin of outdoor club offering survival training courses. Interested in free living. 25¢?

Underground Press Syndicate, Free Ranger Tribe, Box 26 Village Station, New York 10014. Exchange for many 'underground' publications. Send stamped envelope for list of members.

Vocations for Social Change, Box 13, Canyon, CA 94516. 'Employment directory' for protest groups and alternate institutions. 50¢

Vonulife, Box 248, Paradise, CA 95969. Communication among nomads, troglodytes, backwoodsmen, secret city folk and others who live and let live, and live out of sight and mind of those unwilling to let live. Annual handbooks issue, \$1 (500 words/[1]¢)

The Last Whole Earth Catalog, 558 Santa Cruz Ave., Menlo Park, CA 94025. Detailed reviews and source listing of many books, tools, supplies, and other catalogs useful for alternate ways of living. This was published May, 1971 and so is getting a little out of date, but is still much more complete than anything else of its kind. \$5 (3000 words/¢)

Wildcrafter World, RR3 Box 118, Rockville, Ind. 47872. For homesteaders, herb gatherers, trappers. Many letters from old-timers. Publisher died in 1972 but back issues are still being sold. Newsletter 35¢, annual booklet \$1 (340 words/¢)

Win, Box 547, Rifton, NY 12471. Published by War Resistors League. Reprinted papers taken from the FBI. Article on squatting in vacant apartments. Mostly political news and editorials. 35¢; FBI papers issue \$1

World Club Directory, Worldwide Culture Society, Box 129, Beverley Hills, CA 90213. Short descriptions of 2000 clubs and publications; mostly 'lonely hearts' and hobbies. \$3 (150 words/¢)

SURMOUNTING PERSONAL OBSTACLES TO VONU By: Rayo

These guidelines are gleaned from our experience with vonu living so far. I suggest thinking about each of these in turn. See if it applies to your situation and goals. See how many consequences you can develop.

Most of these will seem obvious to your intellect. But are they reflected in your values and actions? As Lee and Skye wrote in LIBERTARIAN CONNECTION, "We were born among sheep, raised by sheep, educated as, by and for sheep – and before we knew better, some of it got thru." But one's 'subconscious' can be gradually 'reprogrammed' to more constructive, less contradictory values. These are not hard and fast rules. Each individual has unique abilities, desires, assets and problems and should think thru or [our] own approach. Most of the examples used are of wilderness vonu, but most of the guide lines are applicable to other forms of vonu as well.

Be as vonu as you can, consistent with physical comfort. Vonu isn't an all-or-nothing thing. There is NO way to be COMPLETELY invulnerable to coercion. But this doesn't justify giving up and 'adjusting' to servitude any more than inability to live forever justifies neglecting health.

Ask yourself 'how much' questions about various approaches. HOW MUCH of the time can I live in a place of my choice? HOW MUCH will I be annoyed by a Gestapo? HOW MUCH chance will I have of surviving a nuclear war? HOW MUCH of what I would like to do will I able to do? HOW MUCH time and resources must I expend to achieve this?

Distinguish present and immediate dangers from possible future risks and deal FIRST with the former. The former include, for examples: nuclear weapons which are ready for launching; existing coercive laws which are often enforced, such as compulsory schooling. The latter include all the spy devices Big Brother might (or might not) have operational by 1984 or 2084.

Select approaches which yield maximum vonu per time and resources expended. It may be wiser to buy a camper, park it in the woods and eat feed-store wheat, than stay in that society another 20 years while trying to learn how to live completely off the land.

Seek vonu, not self-sufficiency per se. A few people cannot live in complete isolation without years, perhaps generations of experience. And they probably wouldn't be very vonu even if they could.

Distinguish wilderness vonu from outdoor adventures. Many 'recreation' and 'survival' skills have little relevance, at least in Siskiyou. We have yet to ski, climb rocks (with pitons, etc.), ride a horse, use an axe (we much prefer saws), make fire without matches, splice a rope. Some skills useful in our situation: maintaining equipment, building with natural materials, orienteering, hunting, first aid.

Vonu your home first. 'Domestic' activities – sleeping, eating, cleaning, grooming, mending, reading, listening, erotics, thinking, exercising, conversing, child care – take up most of one's life. And they are relatively easy to vonu – they can be accomplished without elaborate equipment or deep involvement with outsiders, unlike most means of earning money. Earning money requires relatively little time IF one lives frugally.

Give shelter top priority. Food and other supplies need be purchased only once a year. But a place to sleep and store supplies is needed every day. Don't spend much time learning to keep bees, tan hides or gather mushrooms until you have a home that is 'out of sight and mind'.

Don't build what you can buy at relatively low prices. This includes most mass-produced items. Home-building a camper is poor economics for most people. Concentrate time on the many things necessary for vonu which are not (yet) for sale.

If you must work in that society to earn money, commute seasonally or every few years rather than daily. Don't live in cities and towns when you aren't working. And don't subject non-employed members of your family to smog or threat of incineration.

Vonu first during summers, when simple shelter is sufficient. Then strive to extend the season.

Don't spend time learning a slightly better vocation that's intertwined with the coerced economy. Look for ways to earn money compatable [compatible] with your approach to vonu.

Have savings before trying wilderness vonu. The amount needed will depend on the individual and way of life. \$1000 per person (not counting initial cost of equipment) will suffice for a year of frugal living — maybe two or more. Live frugally while within the coerced economy. Make saving a 'crash program'. Take savings off the top of income and live on what is left. Don't touch savings until you are ready to break out.

Put savings in both liquid and secure forms. Consider: First, at least six months of supplies you know you can use, such as dry food staples, stored where you plan to live. Second, currency no larger than \$20 bills, \$100 to \$500 per person. For larger savings investigate silver coins, other precious metals, and Swiss banks. (See article in VONULIFE #6). Keep out of U.S. savings bonds, banks and other institutions.

Don't speculate in stocks, real-estate, antiques, rare coins, horse races, poker games or anything else unless you are a full-time professional.

Don't spend much on equipment until you have experience with your way of life. Then you will know better what you need.

Take pride in your ability to live vonu, not in your productiveness as a semi-slave. If your present source of income is controllable by the State, avoid ego-involvement. Base your self-esteem on active interests which you can control.

Judge your success by your enjoyment of life as a whole, not by the money you earn. There isn't a high correlation between income and happiness. There are 'impoverished rich' as well as 'affluent poor'. Many an 'upper-middle-classer' not only spends most of er time at tasks e detests but finds that much of er supposedly-high income (what is left after taxes) goes for 'prestige expenses' necessary to 'get ahead'.

Distinguish comforts from status games - e.g., a shelter that is warm and dry, from a house that would impress non-vonuist relatives.

Be willing to pioneer. 'Pioneering' is a romantic word for self-learning – experimentation – making and correcting mistakes. In ten years there may be apprenticeships and relatively-proven procedures for vonu; there isn't now.

Don't give up if you've made one attempt which aborted. Analyze why you failed, find ways to correct the problems, and try again. Success in vonu, like in many fields of endeavor, requires persistance [persistence].

Don't expect vonu to be gratis (or freedom to be free). Vonu requires time, energy, and resources. It is quite costly at first, like most new things. It becomes easier as one gains skill.

Don't expect 'society' or government or a 'reform movement' to GIVE you freedom. There are humans willing to coerce others. And there will be such creatures so long as there are people easy to coerce — willing to 'adjust', 'go along', do what they are told. ('Nature abhors a vacuum.') You CAN'T control how other people live. You CAN reduce your own vulnerability; THEN, perhaps, you can offer help to others who desire vonu strongly enough to 'pay the price'.

Don't expect a PLACE to make you vonu. Human predators can potentially get anywhere you can, and will if something there attracts them. One area may be much better than another for a particular way of life. But vonu depends more on HOW one lives than WHERE one lives.

Be willing to live 'in hiding' – out of sight and mind of most people most of the time, either through concealment or deception. There is no way to have open-house parties at home (for example) and still enjoy much vonu. This is one of the costs of vonu, and it is a price many people are not willing to pay.

Expect to be bored occasionally, once the thrill of breaking loose fades. Most people have spent most of their lives taking orders. One must learn to structure one's own time – choose activities and maintain interest in them over long periods.

Choose goals within your means: skills, capital, and present numbers. Your first goals can serve as stepping stones to further objectives, but should be worthwhile in themselves. It's better to ACHIEVE vonu in modest increments than to only TALK of utopias. You are more likely to attract additional people or financing after you have something to show.

Vonu yourself first, then link up with other vonuans (if you wish). There may be a few opportunities for inexperienced people – mostly

women and very young children – to join already-established vonu groups. But most people must do it themselves.

Don't look for companions until you are achieving the kind of life you seek. You are more apt to find companions willing to do, not just talk, after YOU are doing.

Distinguish vonuans from 'great adventurers' when seeking companions. Be wary of someone who claims to have 'done it all' but is back to 'conventional' living. Also be wary of someone who doesn't want to 'do it alone' but intends to do it as soon as e finds the right group to do it with. Someone who gets bored with herself will probably soon get bored with a few companions. Perserverence [Perseverance] and ability to direct and motivate oneself are more important than any particular experience or skills, tho the latter are also valuable.

Vonu yourself before having babies. Most children 'acculturate' very young and are thereafter hostile to change.

Don't confuse invulnerability to coercion with ability to coerce. 'Rule or be ruled' is a false alternative'; vonu and aggression are incompatible. Vonu does not create any victims, aggression does — and the victims have strong incentive to retaliate or otherwise frustrate the aggressor. Furthermore, a thief rarely finds desirable companions; any potential friend fears *e* may be the next victims. If, despite this, someone desires a career in crime, the easiest way is to go to work for the IRS or other government agency.

Stay relatively mobile so you can respond to emerging opportunities or link up with others.

Don't try to change life-styles in the middle of an emergency, be it a general disaster or a personal crisis. Developing a new way of life involves learning – and making mistakes. Do it when mistakes are least dangerous and most easily corrected.

Be wary of extreme, all-or-nothing predictions. Example: Either there will be a State so powerful that no one can possibly be vonu. Or else government won't be any problem. Historically, both totalitarianism and 'anarchy' are rare and ephemeral. Most likely, those people who are easily intimidated and manipulated will continue to be preyed upon; those people

willing to expend considerable effort to avoid exploitation, will be largely immune.

Emphasize the long-range and positive: creation of a better way of living, rather than survival of some future catastrophy. Various disasters are possible, but time and circumstances are rarely predictable.

WHERE TO GO TO BE VONU

Many vonuans like the Pacific Coast. And most of those favor either Siskiyou region (northern California and Southwestern Oregon, from about Chico to Eugene) or coastal British Columbia. Both have plenty of forest and mountains and creeks and not many citizens. The people putting this issue together live around Siskiyou so I'll write mostly about it.

One big attraction is being away from and upwind of military bases, big cities and other likely targets. There hasn't been a nuclear war yet. I might even bet that there won't be one anytime soon. But I won't bet my life on it! Even now there's fallout from nuclear tests and crop spraying and industrial fumes and this is several times higher on the East Coast than the West.

Another attraction of Siskiyou is the variety of terrain and climate and vegetation all within a few hundred miles. Along the coast temperatures rarely get below freezing in winter or above 70° in summer. From the Coast Ranges to the Cascades, winter temperatures are rarely below 20° and summers are hot and sunny, except on the higher mountains where snow sometimes falls even in July. Some areas are thick forest, others open woodland, others rocky and bushy.

From about mid-October through May there's much rain and snow, but also some warm, sunny days, even in January and February. There are several heavy snowfalls each winter but snow usually melts off within a week or two below 2000-to-3000 feet. There are many little valleys which are fairly easy to get to in summer but are completely isolated during winter except to someone on snowshoes; the valleys themselves may be free of snow but trails go over passes which are snow covered.

Another attraction is few citizens. There are areas of hundreds of square miles without roads (except jeep trails) or (known) inhabitants. Citizens mostly keep to the few river valleys and along the highways. A town of 10,000 is a big city. Even the citizens seem to me to be a little more tolerant and not quite as nosy as 'rednecks' elsewhere. When somebody wants a metropolis, there is Frisco or LA to the south and Portland to the north.

So far as I know the climate of British Columbia is similar to that of Siskiyou; a little wetter and colder overall. Like here, the coast is wet and mild; inland beyond the Coast Ridge is drier with more extreme temperatures.

Some vonuans favor Southern California for its warmer climate. And there's some wild land there too. But not much forest and not many creeks which flow the year around. And there are many more citizens to wander out onto what green land there is. Also there are more cities with missiles aimed at them.

Further inland in the West, between the Cascades and the Rockies, winters are colder and the forests and creeks not so plentiful as in Siskiyou. Cold doesn't matter much to citizens who spend most of their time inside anyway and don't mind burning plenty of fuel. But it does to people who want to blend in with the natural environment.

I'm not urging all vonu people to come to Siskiyou. Someone may have a good situation somewhere else. (As for fallout, one can build a shelter or maybe find a cave.) But for someone who wants to live out of sight of the short-sighted and hasn't found *er* spot yet, Siskiyou is a good region to look over. However I would NOT recommend Siskiyou for:

Somebody 'on the run'. Wilderness vonu is a way to reduce involvement with unpeaceful people in the long run. It's not a way to get away on short notice. Any new way of life requires much preparation and learning. And 'accidents' are likely while one is learning. The time to do it is when one has plenty of time and 'acceptable' ID. In an emergency it's usually best to stay with ways of living one already knows.

Somebody looking for a quick way to earn money. There are opportunities here like everywhere. But discovering them and getting into them usually takes time. So it's wise to have a big grub stake before heading into new territory.

Somebody who wants to grow more than a small garden. Most of the land is steep and rocky. What soil there is, is mostly podzol, not fertile. The only fair crop land is in a few river valleys and that land is all occupied. It sells at a high price compared to farm land elsewhere. There is plenty of

rain but it comes at the wrong time for crops – and leaches minerals out of the soil – so most crops have to be irrigated and fertilized.

Somebody who wants to observe vonuans. There isn't a central community of vonuans nor any one place where vonuans gather. VONULIFE's mailing address is only that. There isn't any particular concentration of vonuans near there. A concentration would be un-vonu. There are little groups and families and individuals scattered here and there. They are most interested in meeting, (1) other vonuans with similar interests, (2) sympathetic settled people who offer things vonuans want (such as mailing addresses, parking space) or want what vonuans can offer (sometimes labor, money, particular skills). Many are new at vonu living and are still too busy getting the kinks out of their own affairs to offer much more than friendly words to newcomers. Even those who are open to visitors (some aren't) are difficult to meet because they are difficult to find.

So come to Siskiyou only if you think it's the best place for you to do your thing. And after you are doing it you will probably get to know others who are doing it and maybe you can do it better together. I suggest arriving in early summer so you will have time to look around and to get shelter and supplies ready before winter if you decide to stay.

It's not difficult to find squat spots good enough for a few days and that's enough time to find something better. Almost any spot that's not in sight of houses or roads will be okay. Stay out of the towns as much as possible. There are many summer transients, and local citizens and their keepers sometimes get unfriendly. Buying low-cost food isn't difficult. There are feed and grain stores in almost every town and food co[-]ops in some of the larger towns, though prices and selections won't be as good as in a big city.

Most creeks in unpopulated areas are safe to drink from. But it's best to boil or chlorinate until you know what there is upstream.

Be very careful with fire. A fire is one thing which can bring a storm of angry bludg. Cook on some kind of stove with a good spark arrester, and with only bare dirt under and around it. Cook after dark so smoke won't cause a false alarm.

If you would like contact with someone local before coming, or would like some help or advice, write and tell in detail your situation and wants and I will attempt to forward your letter to someone able to help. Please include 24¢ a letter and allow two months for forwarding. See other suggestions for making contact further on.

Topographic maps show land contours, creeks, forested ares [areas], and roads and settlements which existed when the map was made – mostly 1940's. Maps to the scale of 1:250,000 (1/4 inch equals 1 mile) were 60¢ each from U.S. Geological Survey, Denver, CO 80225 or Washington, DC 20242. Siskiyou west of the cascades is covered by Ukiah NJ10-2, Chico NJ10-3, Eureka NK10-7, 10, Redding NK10-11, Westwood NK10-12, Weed NK10-8, Alturas NK10-9, Coos Bay NK10-1, 4, Medford NK10-5, Roseburg NK10-2, Klamath Falls NK10-6, Crescent NK10-3, Salem NL10-11, Bend NL10-12. Most of these maps cover two degrees of longitude and one degree of latitude. For example Ukiah goes from 39° to 40° north and 122° to 124° west. Also ask Geological Survey for indexes for Calif. and Ore. of 15-minute topographic maps, no charge. These are one inch to one mile maps and show more detail.

Forest Service maps show creeks, roads, some trails, and whether land is 'public' or 'private'. The road information is more up to date than on the topo maps. The scale of most of them is ½ inch to one mile. They can be ordered from or picked up at the headquarters of each National Forest. No charge last I knew. Address, "Headquarters, _ National Forest..." National Forests and headquarter towns in Siskiyou region are: Mendocino, Ukiah, CA; Tahoe, Reno, Nev.; Plumas, Chico, CA: Lassen, Susanville, CA; Six Rivers, Eureka, CA; Shasta-Trinity, Redding, CA; Klamath, Yreka, CA; Modoc, Alturas, CA; Siskiyou, Grants Pass, OR; Rogue River, Medford, OR; Winema, Klamath Falls, OR; Fremont, Lakeview, OR; Siuslaw, Corvallis, OR; Umpqua, Roseberg, OR; Deschutes, Bend, OR. For areas covered see road atlas or oil company maps. Bureau of Land Management local offices have maps which show land they claim, which is much of the land not in National Forests. Some National Forest maps also show BLM land, some don't.

CLIMATES OF THE STATES, temperature and precipitation tables and maps. For Ore. and Calif., 25¢ each. U.S. Gov. Printing Office, Div. of Public Documents, Washington, DC 20402.

Geologic Map of Oregon, of Calif. 35¢ each, U.S. Geologic Survey (address above). Prices may have gone up.

WAYS TO COMMUNICATE WITH OTHER VONUANS

Some vonuans would rather not, which is fine too. This is for those who do.

Try to spot vonu achievers among people you already know. Many dislike living at the beck and call of every 'authority'. Most are too tied into the system (or feel they are) to do anything except maybe make angry little noises. But here and there someone is quietly getting more and more of *er* life under *er* own control. *E* probably doesn't call *erself* a vonuan and *e* probably doesn't have all the angles figured out (neither do I). But maybe you and *e* can figure better together.

Subscribe to and publish letters in VONULINK, the bimonthly newsletter issues of Vonulife. VONULINK is especially for people who live in isolated places or urban anonymity and prefer to communicate mostly by mail rather than face to face. VONULINK contains open discussions, updates to articles in Vonulife handbook issue, and news items. Each subscriber has the right to include unedited material – up to six 7 ½ x 10 pages a year if black on white and relevant to vonu. There are no activity requirements except that institutions or their agents are not eligible. Circulation of personal material is limited to 100 copies. (I reserve the right to split VONULINK, probably geographically, if necessary to keep circulation under 100, but promise to send at least 40,000 words or give extension or refund.) A one year subscription INCLUDES the next handbook issue of Vonulife, and is \$4.

OR, write to Vonulife for samples of other vonu zinets (minimagazines). These are distributed in different ways by different people in different places so that communication is decentralized and vonu. Most zinets are for people who live in the same regions are for people who live in the same regions and have similar interests, and want to get acquainted and visit as well as communicating by mail. Some vonu zinets are NOT listed or advertised, and can be contacted only through Vonulife or a present subscriber. Some are strictly information swaps and do not sell for money.

For a trial subscription of at least two issues (maybe more, depending on the zinet), send \$1* and a description and of yourself. Tell as much as

you can about your situation, background, world-views, objectives, capabilities and interests (but no need to include specific personal information such as residential address or name of company or school you attend). Describe the kinds of communication you would like. Say whether or not your residential address and phone number (if any) may be published. Say whether or not your letter may be published without name and address. Please mention any 'vonuist', 'liberation', 'survival', 'back-to-the-land', etc., periodicals your presently read – to avoid accidental duplication.

I'll read your letter and relay it to the zinet I believe is most in line with your interests. (If there isn't one yet I'll send VONULINK or refund your money). Most vonu zinets including VONULINK swap material of general interest (but NOT personal contact info) so I recommend AGAINST subscribing to more than one. Send your description and \$1* to Vonulife – address on back cover.

*Some zinets are free to those who live out of sight and mind most of the time. So if you do but can't spare a dollar write anyway.

Send letters for forwarding. Send several carbon copies if you want, along with 24¢ each (stamps okay). You may direct letters to Vonulife authors, to people in a certain geographical area, or to people I believe might have certain interests, etc.

Orders for this issue or for COMPLETE SETS of older back issues are filled by whoever picks up the mail, usually within a week. But all other mail must be relayed to me, wherever I am. So please allow two months for forwarding of letters or subscription orders. (Often times it's faster, but don't depend on it.) See back cover for Vonulife's address.

VONULIFE ISSUES FOR SALE

VONULIFE 1973. Copies of this issue: 50¢ each plus 50¢ per shipment, postpaid third-class. Copies in good condition may be returned postpaid for refund or credit of 40¢ each.

VONULIFE 1974. I'm accepting advance orders. Single copy \$1, if order arrives during 1973. (Price may be higher when published, depending on size and postal rates then.)

The following are newsletter-size issues published from May 1971 through Sept. 1972. Each contains about one-fourth as many words as does this issue. Some of the contents.

- #1. Many situations and searches. Pinyon nuts and other West Coast wild foods. Acquisition/use of 'private' land. Pedestrian nomadism. Keeping your bod dirtless, by Fry. Steel drums for storage. Hygeia's Hygienic Review (happiness). Education. How to live on wheels. What if there was a millennium and no one came (freedom heuristics) by Lee and Skye. Freedom strategy (terminology, vonu and liberty) by Rayo.
- #2. How to live in a VW bug, by Aikido Al. Russian-style 'hippies.'. Uncover undercover. How to find a freemate. Free-marriage contract. Have your child at home. Pacific Northwest wild foods. Freedom Strategy (wealth) by Rayo.
- #3. By Orion. The Year 2000, by Lee. Methane bibliography, by Stumm. The poorman's motor home, by Fry. Scouting public lands for primitive living, by Adam. Report on Costa Rica, by Maehl.
- #4. Do-it-yourself tooth repair, Fry. Air drops into S. American jungle. Clandestine communication net. By Doerr. Freedom strategy (against retreatism) by Rayo).
- #5. By Fry. The freeman in the slave state. Vonu in cities. Survival of nuclear war.
- #6. By Doerr. If the FBI knocks. How to get land in B.C. The soddy. Frontier dugout. Buying and burying silver coins. Mexican dentists. More on nuclear war. Vonu transportation ideas.

- #7. Many situations and searches. Vonu in the mountains. Health, by Fry. Electrical converters. How to hide a camper. Vonu fruit growing. Vonu communities.
- #8. Barbed wire. Selecting site for vonu home, by Rayo. Hygeia's Hygienic Review (simplify). Medicine, by Fry. City squat sports. By Doerr. More on nuclear war, by Mitchell Jones. FWTC newsletter #1.
- #9. Living with children in a bus. Small vonu community. Renting apartments vonuly. By Rayo. Alternate money experiment. Elmer Fudd's Bandwagon. More on nuclear war. Unbreakable cipher. Living in Mexico.
- P-I Reprints. From PREFORM-INFORM 1968-69. On living in motor vehicles.

Complete set of older back issues (all ten items above) for \$2.50 postpaid. Individual issues 25¢ each plus 25¢ per shipment postpaid.

BACK COVER

VONULIFE is published every two months by Mike Freeman. See bottom right of this sheet for mailing address. A specific handbook issue is published in March; Vonulink newsletter issues are published the other months.

One year subscription, including the next handbook issue and five Vonulink issues, is \$4, mailed anywhere. Vonulink issues are sent first class. Subscriptions for Vonulink are not accepted from institutions. Handbook issue only is \$1. For back issues see p. 120.

Unclassified advertising in Vonulink issues: 1/4¢ per character or space plus 20¢ an ad. No checking copies.

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NOTE TO PUBLISHERS: Vonulife is seeking a regular publisher to distribute or publish Vonulife 1974 handbook issue.

NOTE TO SUBSCRIBERS: There is no March Vonulink, because of the work of getting this out. Also some of the letters which have come are included here. Subscriptions are extended by two months.

Bibliography

Sources and postpaid prices are given (if known) for books not generally available in libraries.

The following literature on food is recommended by Haelan Hygeia (see article, "Far out eating for \$10 a month").

AMINO ACID CONTENT OF FOODS, M.L. Orr and B.K. Watt. Home economics research report #4, USDA, 1957. 75¢. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

ANIMAL MACHINES, Ruth Harrison. Expose on livestock raising.

COMMON EDIBLE AND USEFUL PLANTS OF THE WEST. Muriel Sweet. 1962. \$1. Naturegraph, Hea Idsburg, CA 95448. 64 pages.

COMMON FLESHY FUNGI, Clyde M. Christensen. \$4.25? My favorite single mushroom key. Burgess Publishing, 426 S. 6th St., Minneapolis, MN 55415.

COMPOSITION OF FOODS, Watt and Merrill, Ag. Handbook #8, USDA. \$2. Superintendent of Documents (above).

DIET FOR A SMALL PLANET, Frances Moore Lappe. Interesting but doesn't show how recommendations ultimately arrived at.

DISCOURSES ON THE SOBER LIFE: How to live 100 years, Luigi Cornaro, 1464-1566. \$1? Health Research, 70 Lafayette St., Mokelumne Hill, CA 95245.

EARLY USES OF CALIF. PLANTS, Edward K. Balls, 1956., \$1.75, 103 pp. U. of Calif. Press, Berkeley, CA 94720.

FASTING CAN YOU SAVE YOUR LIFE, H.M. Shelton, 1964, \$1.15, 91 pp. Dr. Shelton, Pob 1277, San Antonio, Texas 78206.

FEEL LIKE A MILLION, Catharyn Elwood

FOOD COMBINING MAKE EASY, \$1.20, 71 p. American Natural Hygiene Society, 1920 Irving Park Rd., Chicago, Ill 60613.

FOOD IS YOUR BEST MEDICINE, Henery g. Bieler.

GATEWAY TO SURVIVAL IS STORAGE, 75¢. Walter D, Batchelor, 61 Beacon Ave Ave., Layton, Utah 84041.

THE HYGIENIC SYSTEM, H.M. Shelton, volumes 2 and 3. \$5.50? a volume. 1934 revised 1963. Vol. 3 is most complete book on fasting I've seen. Shelton (above)

THE HERBALIST, Joseph E. Meyer

HUNZA HEALTH SECRETS, Rene Taylor

LET'S EAT RIGHT TO KEEP FIT, and LET'S GET WELL, Adelle Davis

MAN ALIVE YOU'RE HALF DEAD, Munro

THE MOLDS AND MAN, Clyde Christensen

MY EXPERIENCES WITH LIVING FOOD, Kristine Nolfi, MD. \$1.25?, 23 pp. Health Research (above)

NUTRITION AND PHYSICAL DEGENERATION, Weston A Price

OIL STORY, Paul Hawken and Fred Rohe – pp. Send stamped envelope. Organic Merchants, c/o Erewhon, 8003 Beverly Blvd. Los Angeles, CA 90048.

OPEN DOOR TO HEALTH, Fred D. Miller

RANCIDITY IN OILS, Don E. Townsend and Gordon L'Allemend, 1962, 15¢, Lee Foundation for Nutritional Research (report #8), Milwaukee, Wisc.

REBUILDING HEALTH, Ebba Waerland.

SHALL WE EAT BREAD?, R.W. Bernard, \$1.50. Health Research (above)

SPROUT HANDBOOK, A. Stuart Wheelwright, \$3.95, 61 pp. Good but expensive. Research Technical Service, 3747 Quincy Ave., Ogden, Utah.

STALE FOOD VS FRESH FOOD, The cause and cure of choked arteries Robert S. Ford, 1969, \$3.50, 48pp. Magnolia Laboratory, 701 Beach, Pascagoula, Miss.

STALKING THE WILD ASPARAGUS, STALKING THE HEALTHFUL HERBS, Euell Gibbons.

SUGAR STORY, Fred Rohe. 1 page. Organic Merchants (above).

Ann Wigmore, 25 Exter St., Boston, Mass. 02116. Info on wheat grass, sprouting, and natural healing. Send a dollar – tell her what you're interested in.

WILD EDIBLE PLANTS OF THE WESTERN U.S., Donald R. Kirk, 1970 \$3.95, 307 pp. Naturegraph (above)

YOU DON'T HAVE TO BE SICK, Jack Dunn Trop, 1967, \$1.15, 231 pp. Good introduction to natural hygiene. American Natural Hygiene Society (above).

YOUR DIET, DIGESTION AND HEALTH, Edmund Sigurd Nasset. Summary of orthodox nutrition – helpful.

Other literature which is referred to in this issue or otherwise recommended.

AT HOME IN THE WOODS, Vena and Bradford Angier, \$1.50 pb. Collier Books, 866 3rd Ave., New York 10022.

FIFTY YEARS A HUNTER AND TRAPPER, E.N. Woodcock. \$1.50 A.R. Harding, 2878 E. Main St., Columbus, Ohio 43209.

HOW TO LIVE IN THE WOODS ON \$10 A WEEK, Bradford Angier

INNOVATOR. No longer published; back issues may be available from Efficacy, Box 1747, Harlingen, TX 78550 or from Lisa Dawn, Box 90913, Los Angeles, CA 90009. Send stamped envelope.

THE LAST WHOLE EARTH CAT. See p. 113

LIBERTARIAN CONNECTION. See p. 112

LIVING THE GOOD LIFE, Nearing

THE MOTHER EARTH NEWS. See p. 112

NO MORE PUBLIC SCHOOL, H. Bennett, \$2.95. Random House, 201 E. 50th St., New York 10022.

OUTDOOR SURVIVAL SKILLS, Larry Dean Olsen, 1967. \$2. 188 pp. Brigham Young U. Press, Provo, Utah 84601.

THE PAPER TRIP. 28 pp. 1972? Original edition \$5.95, Eden Press, 15951 Diamond St., Westminster, CA 92683. Reprint 35¢, Rev. Keith Gormezana, c/o People's Press, 621 Holt Ave., Iowa City, Iowa 52240.

PIONEER. See p. 113.

For other periodicals and some publishers, see page 111.

AFTERWORD

Proofreading this March 1973 edition of *VonuLife* demonstrated to me just how intricately detailed vonu, as a libertarian strategy, is in reality. Greatly expounding upon both philosophy and practice, I was particularly impressed by 16 "Ways to Live Freer" A Critical Evaluation, Warmth Without Fire: Complete Plans for \$55 Foam Hut, Free City Shelter as a Guest, Ethical Land Use, Rooting Out the Outposts, Surmounting Personal Obstacles to Vonu, and even Nude Dancing Moneymaking Opportunity. These articles provide fascinating avenues to explore for those who comprehend the basics of vonu as explained in Jon Fisher's compilation of Rayo's articles (the original Vonu book).

My least favorite article was Haelan Hygeia's *Far Out Eating for \$10 a Month*, not only because of its subject matter, but also due to its 64 page length, which is broaching the chapters of Carla Emery's infamous encyclopedia on homesteading. Considering developments made since the '70s, I found much of Hygeia's advice to be outdated, given that bulk food purchasing can now be done easily through a membership with a warehouse club (as well as some grocery store chains). While I appreciate her forthright effort in managing her weight, nearly anyone who has subsisted on MREs while backpacking for hours a day tends to lose quite a bit of fat, if not also some hard won muscle mass as well.

A few words on *Secure Banking*, *Alternate ID*, and *Secure Mailing Address*. I believe that paper-tripping is still potentially viable, but it needs to be tested now in early 21st century "post-9/11" America. Because of the "War on Terror," the laws concerning identity documentation have been greatly tightened, and therefore the older literature on paper-tripping is largely outdated, albeit a starting point as to how it is supposed to work. Worst case scenario, the use of Proxy-Merchants (as explained in *The Second Realm: Book on Strategy*) might become the only conceivable way to facilitate the use of alterative identification by vonuans, especially as a form of import-export with the servile society; regardless, experimentation and further legal research will show viability.

Uniquely, Rayo's *Teach Reading at Home a Simple, Unique Way* is a homeschooler friendly way to teach a child how to talk. Although I am unsure as to the effectiveness of his "visionetic pronunciation" (v.p.) method, its potential usefulness in acculturating children to intrinsically view the servile society as a hostile alien entity is not lost on me. As Rayo himself pointed out, the special relevance of v.p. to vonu is that it provides a natural filter against television and radio yet reduces the barrier to printed words.

The more vonuist literature Shane Radliff digitizes, the greater benefit libertarians enjoy. I encourage you all to root out the outposts (exorcise the collectivist spooks from your head) and explore what lifestyle options are available to you so you

can live more freely in an otherwise unfree world. By exploring the archived (older) vonuist literature now becoming more and more available through the Internet at **vonupodcast.com**, I'm sure y'all can find the inspiration to find your own "solutions" and then share them with other vonuans as you are comfortable doing so.

Kyle Rearden Austin, Texas November 2017 This digitized publication is covered by a BipCot NoGovernment License. This permits re-use and modification to anyone except for governments and the bludgies thereof.



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