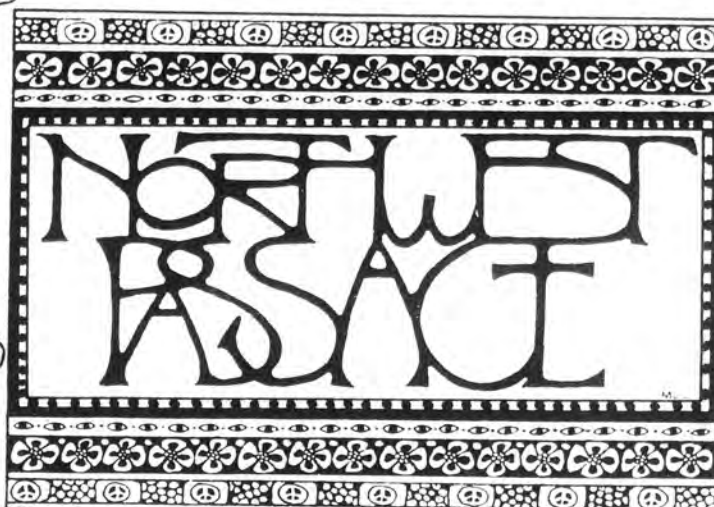




Volume 2
Number 4



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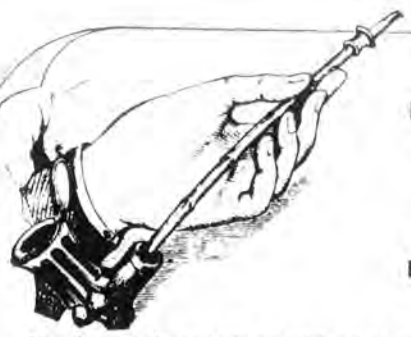
Bellingham and Seattle, Wash.
December 16, 1969



environment in trouble

DDT
ATOMIC
POLLUTION
GEORGIA PACIFIC

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GEORGIA PACIFIC

The Forbidding Castle

by joel
connelly

Not long ago a friend inadvertently criticized the operations of Georgia Pacific's Bellingham toilet paper colossus to a daughter of the plant's founder. Taken aback the woman vehemently replied: "How dare you say that about Daddy's plant! Why, it sits down there like a castle on the Rhine!"

To the fancier of black humor the above comment may seem magnificent in both its sincerity and its assumed ludicrousness. Others will conclude that the pulp mill brass are blind as well as arrogant. I use the remark for a different purpose, however. I find it accurate and to the point.

In Medieval times castles on the Rhine were the center of a harsh community existence. The princes and barons living in them were the undisputed masters not only of their serfs but of the surrounding townsfolk as well. They were clearly above the law, and when it suited their interests they made rules and regulations to benefit themselves.

All feared the masters of the castles. Life was not easy as barons extracted every possible minute of work from the serf and every conceivable product from the land. Few lords ever made any substantive contribution to the existence of the populace. They were exploiters. The one benefit derived by the people was protection from roving bands of robbers and other princes bent on blatant looting and burning.

More than 600 years have passed, and we are far from the real Rhine. However, Bellingham (as well as many another Northwest town) is but a vassal community for a corporate prince - that is, Georgia Pacific. The company exacts merciless tribute from the land and inhabitants. The workers and petty bourgeoisie subsidize its artificially low water rates. The Chamber of Commerce acts as its instrument in fighting the preservation of the forests and mountain areas untouched by the buzz saw. The newspaper and radio stations shy away from its unsavory activities. And what of these activities? Our "castle on the Rhine" does not even guarantee our

physical existence, but rather threatens our lives with its chlorine plant and emissions of mercury into our waterways and the air we breathe. We find Bellingham Bay the repository for G.P.'s chlorine, sulfuric acid, and ligninite. The citizens of the town, especially after its shops close down, breathe heavy doses of "sulfur" from the plant as well as whatever the chlorine plant is letting off (the subject of a future article).

Let us move to concrete examples of the domination of the corporate barons. Seems like a few years ago the "Herald" was aglow with reports of a new "Chemical" plant to be built in Bellywash. Stressed in the coverage and press releases were figures of how many people the facility would employ. The "birdwatchers" were thrown off, and even now few have wised up to the fact that the chlorine plant is the type of facility that other communities throughout the nation have resisted. Chlorine, you see, is the stuff which periodically causes the evacuation of Mississippi Delta towns after railroad accidents. G.P.'s record thus far is hardly the kind to reassure environment enthusiasts. The N.W. Passage revealed in its September 23rd issue that the toilet paper colossus is unloading mercury into the water and air. Now it appears that we may add chlorine itself to the list of things in Bellingham Bay that Georgia Pacific refuses comment on. Ditto with sulfuric acid. As to plant operations reassurance was not provided by an accident during construction which saw "something" of a yellow bilious nature emitted into the atmosphere of the community. It might be mentioned here that chlorine appears yellow and bilious when released into the air. It also reaches equilibrium by sticking close to the ground, as allied troops experiencing German poison gas found out during the Great War.

Over the Thanksgiving vacation a woman on Forest Street went out into her back yard to take in some laundry late one night. She observed the usual clouds of "sulfur" rising from the toilet paper colossus. Georgia Pacific

shuts down the filters at night, not to mention dumping enough stuff into the Bay that areas of it bubble like a Yellowstone paint pot. Anyway, the woman caught one whiff of "something" coming from the chlorine plant and staggered back into the kitchen. She vomited into the sink, then passed out on the floor for 20 minutes. Coming to, she phoned the gendarmes, but was told that there are no anti-pollution statutes on the books which they could use to act. On calling the chlorine plant itself the response was "I only work here lady". Finally, in desperation, the woman tried the plant supervisor. Perched atop Alabama Hill the gentleman's comment was an aloof "I can't smell anything". Needless to say the odor was back the next night - and the night after that.

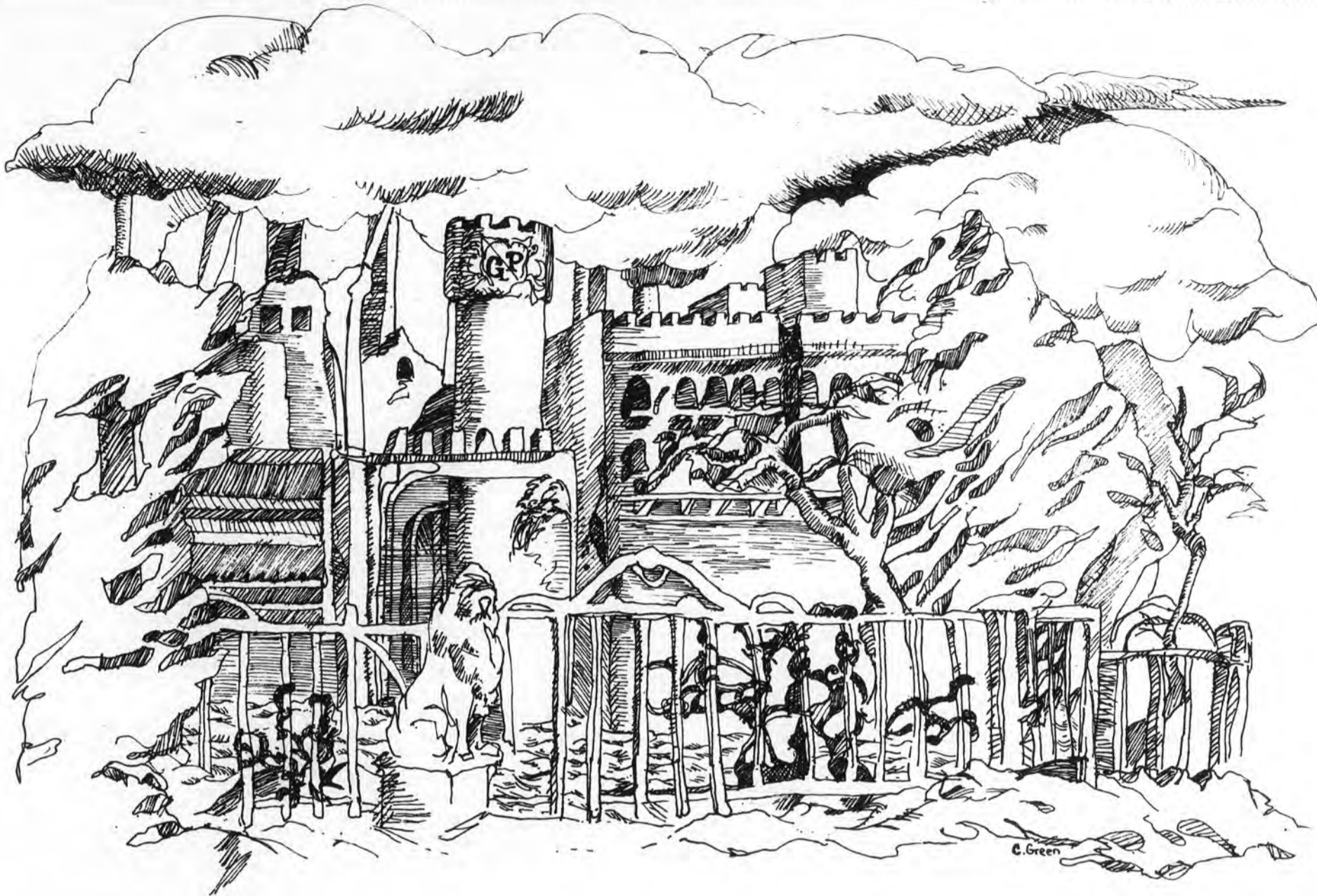
The aforementioned Forest Street resident, even as she washed the "sulfur" from household linens and drapes the next day, questioned neighbors about the smells and their reactions to them. All were affected, but most refused to act. The reply of one specialty shop owner was typical. This man commented: "Much of my business comes from the wives of their executives. If word of my protest got out, I could be ruined". Don't tell me the barons don't hold the merchants in bondage.

I have thus far concerned myself with technical operations of the "castle on the Rhine". However, a mere focusing on the poisoning and pollution by Georgia Pacific does not give an adequate idea of the power of the toilet paper colossus. As has been mentioned in earlier articles, G.P. toys with the "city fathers" and forces the ordinary taxpayer to foot the bill for one key element of operations - water. Pulp mill water rates are low, but that's only half the story. G.P.'s needs some years back were so great as to cause a rather drastic summer drop in the level of Lake Whatcom. While in the shortrun the city enacted stringent lawn sprinkling rules the long range solution was construction of a multimillion dollar pipeline to convey

water from the South Fork of the Nooksack River to the lake. Who paid for it? We can borrow the rhetoric of George Wallace and say "the construction workers, the small businessmen, the policemen, the beauticians, and the taxicab drivers". Just last September the need for a new \$800,000 pipeline into the pulp mill was revealed. In order to poison, G.P. needs clean water. So, the taxpayers will again pay the princes for the privilege of being abused by them.

Just as the lords of the Rhine castles not only made the rules and regulations but were above them, so too are the top personnel of Georgia Pacific (not to mention, of course, the company itself). Example: A rookie cop was on duty late one night on the Guide Meridian south of the Bellingham Golf and Country Club. A Cadillac made its way in uncertain fashion towards the center of town. The policeman stopped it and made the semi-coherent occupants take the "walk a straight line" test. They failed to pass. Thus the top local prince of the corporate dynasty, along with spouse, were packed off to the drunk tank. The identity of that institution's distinguished resident was ascertained the next morning and the department reverberated with reprimands. Word of the detention by some quirk of fate did not appear in the "Herald" even as that grisly publication recounted the highlights of Bellingham's weekend nightlife.

Now I don't want to indulge in gossip, but the incident just described shows how really perverse and pervasive the power of the "castle on the Rhine" happens to be. It poisons us, tramples our officialdom, and claims status of an entity that is above the law. The brown waters of Bellingham Bay are the repository of chlorine, ligninite, mercury, and sulfuric acid, all deadly chemicals. Shoppers choke on sulfur downtown. Late at night residents of the hill (State, Garden, Forest, High, and parts of the college) have to breathe the "something" which caused a healthy woman who whiffed it to become ill.



One may be amused at post-Country Club antics or the frantic fears of city fathers that the toilet paper colossus might move and "deprive Bellingham of its number one industry". However, the poisoning and most particularly the activities of the chlorine plant are no laughing matter. The barons are not just exploiting us. Chances are they are endangering our lives even as they

drive past State and Forest on the way home to Edgemoor.

The time has come first for Bellingham to wise up to the fact that it does not need the damned thing. Pollution is not a "necessary price to pay" but rather a hideous outrage. The college is Bellywash's leading "industry". The toilet paper colossus is not only harmful and dangerous. What

is more important in the American scheme of things - it is not profitable. Removal of its pollution is not just a matter of life and death. It is a matter of dollars and cents.

So what are we going to do about the bloody thing? Polite inquiries have been ignored or met with the rhetoric of King Louis XVI. Protest through the local newspaper is well nigh

impossible. I would recommend, though, that we not give up on the media. Georgia Pacific's practices as well as its arrogance of attitude could surely bring damnation, public ridicule, and a drop in profits to afflict the "castle on the Rhine". I would recommend, then, provocation in the form of leafletting, public demonstrations, and a dramatic gesture or two. Workers leaving the plant as well as shoppers downtown should be given the cold hard facts of what G.P. is doing to the local environment. Any illusions of benevolence on the part of the company must be destroyed. A call must be issued for the citizens of Bellingham to show their feelings by the simple act of buying somebody else's toilet paper. As for picketing the Seattle press should be called in to cover protests. I would suggest, as a step designed to promote television coverage, a boat brigade to surround and/or hold up a barge or freighter bringing some deadly chemical to the "castle".

All of these steps could bring down a barrage of unfavorable publicity on the corporate barons of Bellingham. Full press exposure of the chlorine plant would compel even the feeble pollution authorities of these parts to force closure of the potentially deadly facility. I emphasize in conclusion the importance and the immediacy of bringing this about. I have spoken of the dominance of a community by a corporation. Breaking the stranglehold is one of the most direct cases I know where preserving environment means preserving life itself.



Tenants Union Takes Action

What's happening with the TENANTS' UNION? Northwest Passage sent a reporter to the TENANTS' UNION office last Friday, to find out some current problems facing this public-service organization.

The TENANTS' UNION (T.U.), an organization to represent the interests of those people living in rental housing, depends on its \$1 per year membership fee for its financial existence. After speaking with Gary Evans (new A.S. Housing Commissioner) and Craig Cole (T.U. Chairman, appointed by Evans), we found that the rate of new membership has declined, even though the housing crisis persists. When asked the reasons for the decline, Evans stated, "Although more and more complaints are being rectified, membership hasn't been emphasized. We are currently initiating another massive membership drive which we hope will alleviate this problem".

A synopsis of the present operations of the T.U. would include action on two racial discrimination cases, the return of a number of withheld damage deposits, and numerous settlements concerning rental fees and contract disputes. A major case that the T.U. is working on concerns a lease agreement between Mr. G. Garrison, owner of Navaho Apartments, and a large majority of those renting apartments from him. Details of the contract could not be released at this time; however, forty-five out of fifty-eight tenants have filed a petition with the T.U. stating that they disagree in part or in whole with the terms of the contract and will not sign it as it is presently stated.

One of the staff members of the Legal Aids Dept., headed by Jon Walker, is assigned to matters dealing specifically with TENANTS' UNION and Housing Commission legal matters. This person is currently negotiating with Garrison in order to produce a lease that will hopefully be acceptable to both the landlord and tenants.

The TENANTS' UNION wishes to emphasize that all Whatcom County rental-housing residents, students and non-students alike, are welcome as members, and are eligible for the services of this organization. Cole, who is flying to Ann Arbor, Michigan on his own money for a two-day conference with the founders of the University of Michigan TENANTS' UNION, had the following to say: "We can help almost anyone who comes to us. Our success is unprecedented, and our representation, in behalf of the tenants, can be of great value. All that a person has to do is ask."

If you are experiencing a housing problem and want the TENANTS' UNION's help, you may contact them at their office in the Viking Union

Building at W.W.S.C., or by phoning 734-8800, Extension 2273, and asking for the TENANTS' UNION.

Free U. Winter Program Set

Registration begins this week for the Northwest Free University's Winter Quarter classes and workshops. Catalogs are available at the Free U table in the Viking Union at WWSC, at the Passage office, at the Aardvark Book Shop, and at Atlantis Handicrafts.

The Free U is offering about 15 special workshops and 27 regular classes.

Registration can take place via the mails (P.O. Box 1255) or at the Free U table at the Viking Union from 10 a.m. to 2 p.m. the rest of this week.

Among the special workshops are: Birth Control Techniques; Body-Control for Actors; Home Maintenance & Repair; Low-Budget Cooking; Film Criticism; Natural Childbirth; Non-Violent Actions; Wine and Beer-Making; Political Dissent; ACLU Practical Problems Session; American Political Analysis; and a special series on Building the New Community.

Among the regular classes are: Alpine Mountaineering; The Drug Experience & Beyond; Group Sensitivity Training (both weekly and marathons); How To Make Money in the Stock Market; Humanistic Reform in Education & Psychology; Mass Media & Society; Quilting; Technical Theatre Introduction; Music & Stuff; Still Photography; Swedish Massage; Yoga; Yoga Seminar; Japanese Conversation; French Conversation; Mandolin, Dulcimer, and others.

The Free U is also expanding its offerings for children next quarter; there will be classes in beginning cooking, creative sewing, creative writing, creative dance, crafts, and art.

Registration fee for the workshops is \$2 per quarter, and for the regular classes \$5 for the first course per quarter, and \$3 for each course thereafter per quarter. In cases of extreme hardship, something can perhaps be arranged.

The Free U will also be sponsoring—along with the Passage and other community-minded organizations—the second annual People-to-People Forums, this year devoted solely to the topic of Environmental Crisis: Causes, Effects, Solutions. The first Forum will be held Monday, January 12, 8 p.m. at St. James Presbyterian Church. More information in the next edition of the Passage in January. If you're not on the mailing list, write the Free U c/o P.O. Box 1255, Bellingham.

Consumers Co-op Cuts Costs

In August, 1969, Puget Consumers Cooperative of Seattle adopted new by-laws which converted it from a conventional cooperative (hidden charges, mark-ups, margins and patronage refunds) to a direct charge, sell-at-cost cooperative. (This plan originated in Canada, and is known as the "Ottawa" plan).

At the time of the change, PCC had nearly 500 members on its list. Two full membership meetings were called to discuss and vote on the change. Information was mailed to all members concerning the new plan. Two questionnaires were sent out to poll member opinion on the change. Yet, only about 85 members responded to the last poll, and only about 35 members turned out for the meeting to adopt the new by-laws! These members voted to put the new plan into effect as soon as possible by operating part "Ottawa" and part "public" with a 25% over-head charge to non-members. As soon as there was sufficient growth in membership (up to around 200 or 250) it would go all "Ottawa".

By the time the September business meeting came up, there were 90 members—and not one bit of time or money had been spent on advertising! There were plans being made to move to a new location nearer the University, and it was felt that the advertising campaign and membership drive should be made at the time of the moving.

Membership has continued to grow—now over 125—and the arrangements for moving are nearly complete. Volunteers have been cleaning and painting the new store, and it should be ready to move into on or soon after 14 December 1969. The new store is almost twice as large as the old one, and contains two walk-in coolers, a cabinet cooler, a freezer case and a meat display case, so there is room for expanding the range of goods carried.

THE NEW STORE IS AT 2261 NE 65th Street.

Under the new by-laws, the following is the way the store will operate:

PRICING:

When a case of groceries arrives from the wholesaler, the case lot price is divided by the number of containers that is in the case. The result is stamped on each container and that is the price the members pay.

CAPITAL:

Each member is required to pay for one \$5.00 share when he joins, and to purchase an additional share every four months until he owns twelve shares. No interest or dividend is paid on share capital. If it is necessary to increase the share capital requirement, the membership makes the decision. The Co-op may borrow money from the members on a voluntary basis at a reasonable interest rate at the time.

SERVICE FEES:

PCC will make a financial statement every quarter. On the basis of cost in that quarter, the Board makes up a budget for the next quarter. At the quarterly meeting the members are called upon to approve the budget, with or without amendment. The approved total is divided by 3 months and then divided by the estimated average number of members in the coming quarter. This calculation establishes the monthly service fee. Anyone can join PCC and a member can resign at any time, but as long as he is a member he must pay the service fee regularly.

The first time a member appears in the store after the start of the calendar month, he will find that the fee is the last item on his cash register slip totalled in with his purchases. If he returns to shop in that month, he does not pay any further fee. If he doesn't shop in that month at all, his service fee will be added to the next month's charge. In other words the fee is paid by every member regardless of how often or how much he buys. Obviously, expenses have to be paid whether some particular member shops or not.

A member may withdraw from membership if he is moving away from the area, or at any time on 90 days written notice.

It would not have been possible to reorganize PCC without a great deal of voluntary work. Some members have put tremendous effort into its operation without being paid. And this is also true of officers and directors and committee members.

WHAT IS NEEDED NOW IS MORE MEMBER-PATRONS!

Student Employment Service

The WWSC Student Employment Service is now issuing a changing bulletin every other day, listing jobs available, required duties of same, and wages and hours. Those in need of employment are urged to check with the SES regularly, and all local employers are urged to notify SES when job openings occur.


Christmas jobs are reported to be scarce for students in Bellingham this year. SES requests of local businesses for Christmas job listings brought in only a minimal response from local merchants.

However, there are still a number of regular part-time jobs available, including listings for waitresses, babysitters, delivery drivers, cab drivers, salesmen, musicians, and others.

Interested students and employers can contact the Student Employment Service in Room 215 in the Viking Union Building, WWSC.

All times are Pacific Standard.

sun



Dec.	rises	sets
17	7:45	4:08
22	7:47	4:09
27	7:49	4:13

moon Moon Phases



Dec. 23. FULL MOON
Dec. 31 Last Quarter

(Times are approx.)

Dec.	rises
17	4:05 PM
18	5:06
19	6:11
20	7:18
21	8:24
22	9:29
23	10:34
24	11:38
sets	
25	1:24 AM
26	2:36 "
27	3:47 "
28	4:59 "
29	6:09 "
30	7:13 "

tide



for Bellingham

Dec.	high				low			
	AM	ft	PM	ft	AM	ft	PM	ft
17	11:34	9.3	---	---	4:40	3.7	7:28	1.8
18	1:40	6.3	12:04	9.2	5:34	5.2	8:10	0.6
19	3:10	7.2	12:34	9.0	6:50	6.3	8:46	-0.3
20	4:10	8.0	1:04	8.8	7:58	7.2	9:22	-0.9
21	5:04	8.7	1:34	8.6	9:16	7.7	9:58	-1.2
22	5:52	9.2	2:04	8.4	10:46	7.9	10:28	-1.4
23	6:28	9.4	2:28	8.2	11:58	8.0	11:04	-1.4
24	7:10	9.5	---	---	---	---	---	-1.2
25	7:46	9.5	---	---	---	---	---	---
26	8:22	9.5	---	---	0:10	-1.0	---	---
27	8:52	9.4	---	---	0:46	-0.6	---	---
28	9:16	9.3	---	---	1:22	0.0	---	---
29	9:40	9.1	---	---	1:58	0.7	5:04	---
30	10:04	9.0	9:10	9.0	2:34	1.7	---	4.7

Letters

THE CAFE CENTRAL
TANGIERS
NOVEMBER 17, 1962

DEAR TOM:

TANGIERS, AND WE'RE ALL HERE IN OUR PAJAMAS
LOOKING FOR PENNIES IN THE MIDDLE OF THE NIGHT,
IN ARABESQUES, INSIDE OLD PHONOGRAPHS, ANYWHERE
WE CAN FIND THEM, ~~WE~~ CROUCHED IN ~~A~~ DOORWAYS
LIKE BLACK COPPER CATS. ALL THE TEETH ~~IN~~ ~~THE~~ ~~MOUTH~~
HERE ~~ARE~~ SLOWLY TURNING INTO DARK RIVERS OF
TOBACCO. ALL THE EYES IN ALL THE HEADS ARE HEAVY
LIDDED WITH THE WEIGHT OF HASHISH, ~~AND~~ ONE DAY
WE'LL USE THOSE BAGS TO ~~STOP~~ DAMP THE FLOOD OF
GOOP THAT WILL ~~OVERWHELM~~ OVERWHELM US ~~IF~~,
IF EVER, ONE OF THESE BROWN MEN OPENS HIS MOUTH
TO UTTER A KIND WORD.

IT'S THE OLD HUSTLE...TRINKETS, SHOE SHINES, ~~AND~~ ~~AND~~,
PALM TREES, 1000 MILE BEACHES ETC, THE MOST INCREDIBLY
WASTED HIPSTERS I'VE EVER SEEN, AND DOGS THAT RIDE
BICYCLES, MEN MAKING NUMBERS, NOSES IN THE GARBONZO
BEANS. ROOSTER LANGUAGE SPOKEN ~~IN~~ THE EMPTY
STREETS AT DAWN, AND IF YOU DON'T UNDERSTAND IT THEN
YOU CAN HAVE SOMEONE WRITE IT OUT FOR YOU LATER
ON TOWARDS ~~3~~ THREEISH OR FIVEISH WHEN THEY
LIGHT THE CITY WITH PIPES.



Charlie Kraft



TAVERN

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ave. n.**

Seattle

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MUSIC"



**11-2 daily
2-10 sun.**

DECEPTION PASS ENDANGERED

The State Park and Recreation Commission is in a tight race with land developers to obtain a 600 acre tract of land immediately north of Deception Pass State Park. Here is the story of a classic struggle between conservationists and land speculators.

The prime forest and grassland may soon surrender to a volley of construction machinery. Where now stands the creation of untold centuries of growth and undisturbed peace, may be a vast complex of homes, duplexes, condominiums and suburban recreational area, and the unthinking, destructive animal which accompanies such a habitat --- suburban man.

The Washington State Park and Recreation Commission, after some time of eyeing the property of E. C. Heilman, began negotiations on September 23, 1968 to acquire the land in order to expand Deception Pass State Park and preserve the area. Around June, 1969, the Commission appraised the land at \$750,000.

Enter land developers who offer Heilman \$1,500,000 for the property, thus putting the Park and Recreation Commission, so to speak, out of commission.

The developers put down \$5,000 in "earnest money" thus gaining the exclusive option to buy the land. Some sources indicate that the developers needed time to drum up capital for the project.

When the developers did not abide by the terms of the agreement, Heilman tried to drop the deal, at that time expressing a new interest in the Park and Recreation Commission's offer. The advantage of the latter would be that payment would be in one lump sum, whereas the speculators would be making long term payments, since they may not have had the money to begin with and secured the option only to hold off the State.

But the developers were able to secure a new agreement with Heilman last month, making the \$5000 "earnest money" good until April, 1970. Meanwhile the Park and Recreation Commission, not wanting to see the natural environment trampled, has a standing policy to try to find the money to buy the land if the deal falls through. They apparently have little faith in the conservation habits of land developers.

The Commission cannot condemn the land at the present time, because as long as there is a willing buyer and a willing seller, it would have to pay the going price (\$1,500,000) which it doesn't have.

The proposed "development" is adjacent to Pass Lake, which would probably become a recreational area, subject to pollution from boating and human waste. Birds in the area would be forced from their habitat, as would

the deer which would probably die while retreating from the onslaught of machines and people. The great fir trees would be massacred, the land leveled, and the whole intent of Deception Pass State Park would be defeated.

The "SAVE PASS LAKE COMMITTEE" has been formed to lead the campaign to urge the state to appropriate the monies to purchase the land. Their hopes rest on the possibility of getting money from a recently passed \$40,000,000 park referendum. The Committee's address is P. O. Box 427, Anacortes, Wa., 98221. Phone 293-2564.

Until now, the mindless drive for profit has succeeded in pushing aside anything in its way, including even those in government who do work for the preservation of what little land there is left in peace, and certainly the interests of the people such "developments" are supposed to serve.

According to conservationists in the area, the issue is no isolated case of the ruination of one small tract of land, but stands rather as a symbol of a trend throughout our history which is accelerating with the drastic rate of population growth --- more and more people at an ever increasing rate sweeping like a tidal wave over a limited amount of land --- caring little for what has gone by or what is to come.

Buy

Bio-degradable

One fourth of the cities and towns in the United States have NO sewage treatment of any kind. And, due to the explosion of people, the rest of America's sewage treatment is grossly inadequate. Tons of biologically active materials are dumped into our waters each day, stifling the natural water life and making these waters extremely dangerous to man. Household detergents are generally biologically active. For that matter, in this area there is only one source of bio-degradable products, those produced by the Amway Corporation. However, Amway is only sold through dealers, not in the stores. In other parts of the country, bio-degradable products are as available as the regular polluting detergents. Ask your local store manager why he doesn't carry totally bio-degradable products and boycott all products that are not bio-degradable.

Waste Not

Want Not

Officials in Tulare County, Ca., are exploring the possibility of using county dumps to bury 100 million pounds of "excess" oranges, said to be worth some \$25 million. Most of the oranges are said to be edible; apparently an influx of Florida oranges is depressing the market.

Bellingham Herald Makes Good



Our special correspondent atop the Herald Building reports that the smoke situation there has been brought to the attention of the building management some time ago by the Northwest Air Pollution Authority; to which they reply'd, that they were in the process of converting their boiler to gaseous fuel, which conversion is to be completed approximately 15 December 1969.

editorial



We are all in a precarious position; like a young colt we remember seeing in our childhood, brave but foolhardy, trying to walk across a rather precariously placed log on one side of which were the powerful rapids of a river and on the other side was a quiet eddy of that river. Needless to say the colt should never have even ventured out on that log but now that it was there it couldn't turn back.

Balanced on stilt-like legs it stepped then slipped--on one side lay almost certain death and on the other side lay a good drenching but ultimate safety. The story has a happy ending for nature had well endowed this colt with survival instincts; it threw its weight to the side of the quiet eddy where eager hands were waiting to help it out.

Mankind is like this colt, lacking the foresight not to have stepped out on the log in the first place, he finds

himself slipping into inevitable destruction in the torrents of his environmental destruction, his global poisoning, his overpopulation. The colt as an individual had the necessary survival instincts to make the best of its situation--but does man as a species have the ability of a single colt to shift its weight at the last minute and ultimately save itself?

Northwest Passage feels that, although it is too late to completely escape the ecological consequences of our actions (the colt did not escape dry) we can, by shifting our weight now, for it is almost the last minute, come through this crisis, drenched to be sure, but alive and well.

In Bellingham and the Pacific Northwest, the Northwest Passage finds itself with a particular burden of responsibility as one of the only media aware of the magnitude of the raging river and certainly the only one in Bellingham aware of our position on

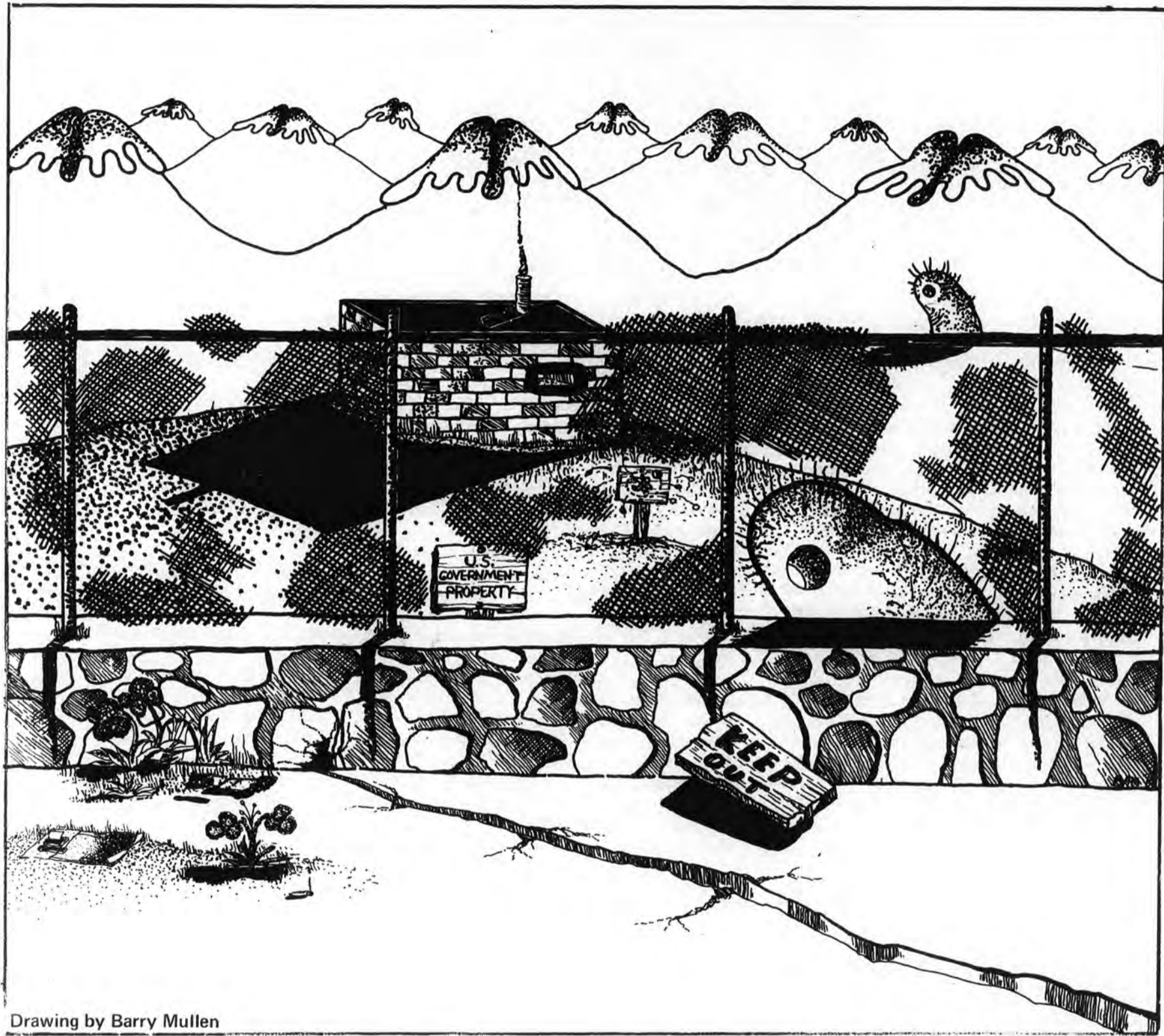
the log (see article on Bellingham Herald's being cited for air pollution).

There are many causes we support--and will continue to support--the withdrawal of all American troops from Vietnam; the courageous struggle for black liberation at home; the struggle for freedom from Soviet and American economic and military imperialism, just as we support the Czech freedom fighters, we support the National Liberation Front; the legalization of marijuana; sexual liberation; the end of the draft and the dismantling of the military state; the list is endless and the struggles are just.

There is one cause which we feel takes precedence over all these and that is the relationship of man to his natural environment, the relationship of man to that larger process which is his creator and destroyer, his lover and mistress. *We shed our cocoon -- the Northwest Passage focuses on ecology -- our environment is in trouble.*



WHERE WE ARE NOW



Drawing by Barry Mullen

ATOMIC POLLUTION

by michael kerwick

And on the day man was first set upon the earth, it was beautiful. And he saw the spacious meadows around him and said, "Let us build our houses, villages and cities on these green meadows". And when no meadows remained man said, "It is good".

And on the second day man beheld the rivers, lakes and seas. And he said, "Let us hurl our waste into the waters so we may be clean". And when

pollution had ruined all the waters man said, "It is good".

And on the third day man watched the wildlife that abounded and he said, "Let us kill the animals for food and clothing and sport". And when all wildlife became extinct man said, "It is good".

And on the fourth day man viewed the verdant forests and said, "Let us

cut down the trees and grind them up for our own use." And when no tree stood, man said, "It is good."

And on the fifth day man gazed at the heavens and said, "Let us burn out filth and pour it into the air." And when the skies filled with smoke and dust that burned his eyes and shortened his breath, man said, "It is good."

And on the sixth day, man said, "Let us make weapons to destroy those who are different from us." It was done. And man said, "It is good."

And on the seventh day, man rested from his labors. And it was quiet. For none walked upon the face of the earth. And it was good.

Atomic plants for Kiket and Samish Islands? And why not? It is good.

Well now, who really cares what's going on until you find it happening in your own back yard? Well, a lot of people. Me included. But what's getting me all so uptight is the fact that there IS something happening in my back yard. Why yesterday I found a cat all balled up that looked like it'd been breathing too much tuna fish. (GP smoke.) That set me to wondering. If that cat lying there all sprawled out prostrate on the ground can be affected by a little tuna fish smell, what's going to happen to it when it eats a radioactive tuna fish. Yep, it's possible because I read the other day that there are three nuclear power plants proposed for our own Northwest Washington area.

Now I'll be, I come to find out that trucks with loads of gravel are already rolling down off of the Sneee-oosh Road out onto Kiket Island near Deception Pass where Seattle City Light plans to situate a nuclear generating plant. I wonder why Seattle City Light would come all the way up here to buy Kiket Island from Gene Dunlop, a Skagit County power buff, when they could situate their reactor either in, or nearer to, Seattle and save on transmission costs? Why not put it where the old gas works stand on Lake Union? Could it be that it poses some threat to a heavily populated area? (Sounds like an old proverb I once heard: "Put it in the country where it will kill less people.")

"put it in the country where it will kill less people"

I also discovered that Snohomish PUD is going to build a reactor of their own on land adjacent to Girl Scout Camp Kirby on Samish Island. According to Mrs. Audree Kajfas, director of the Samish Council of Campfire Girls, which governs Campfire Girl activities in Whatcom, Skagit, and Island counties, the utility has obtained an option to buy the land. You'd have to have a board loose in your attic to want to situate a nuclear reactor next to camp Kirby. I do imagine the prospect upsets a number of people including those whose childhood remembrances go back to their campfire days at Camp Kirby. Mrs. Kajfas reports that her council will hold a board meeting with an organization of concerned citizens known as the Committee to Save Camp Kirby. Afterwards a policy statement will be made. It is expected they will take a strong stand against the PUD project. A united position may be formed with the Committee to Save Skagit Bay, a group organized in opposition to the Kiket Island power plant.

Lo!! And Behold!!! Our own neighbors at Puget Power are shuffling their feet in the same parade, and have a reactor in mind for the Cherry Point area. Apparently they acquired land even before Intalco began buying theirs. Now, who could imagine something more insidious than the chemical pollutants Intalco emits? Well, I couldn't until I discovered that Edward Teller was even more concerned about the dangers of atomic power plants than he was about his own invention - the H Bomb.

ATOMIC POWER PLANTS

What is an atomic power plant? Well, it's some sort of contraption powered by a nuclear reactor that runs a turbine that produces electricity. There are different types of reactors, boiling water reactors, fast breeders, sodium-graphite reactors, homogeneous reactors, etc.... You can be sure that each type of reactor is associated with radioactivity and one hell of a lot of heat.

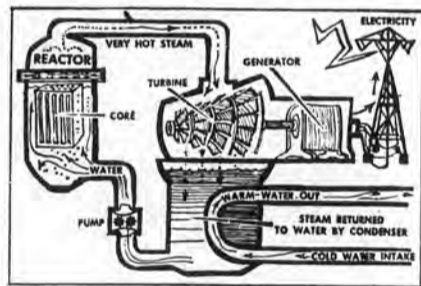
Let's look at the operation of a nuclear power plant: in each type of reactor, electricity is generated by steam which is produced either directly or indirectly through heat exchangers by the heat from nuclear fission.

In a boiling water reactor the fuel used is uranium oxide which is formed into pellets. These pellets are packed into long, thin walled tubes called the "cladding". These tubes make up the fuel rods. Each fuel rod is approximately one-half inch in diameter and twelve feet long. There are thousands on them in a reactor.

The fuel rods are assembled into fuel elements which in turn are packed into a container called the reactor core.

Control rods, dividing the fuel elements, absorb neutrons released through fission, thereby controlling the rate of reaction. A moderator of heavy water is used to reduce the speed of the neutrons emitted during fission in order to restrict them to the core area.

Water pumped through and around the fuel rods in the reactor is called the primary coolant. The heat it gains from the fissioning fuel is used to generate steam which then drives turbines that generate electricity.



Boiling Water Reactor

In the fast breeder reactor, no moderator is used to slow the neutrons produced by fission. Instead the fuel elements are surrounded by a blanket of "fertile" elements, such as uranium 238, itself not fissionable. The neutrons produced in the chain reaction are absorbed by the fertile blanket, which results in the breeding of new atomic fuels. In the case of uranium 238, fissionable plutonium would be produced.

Dr. Teller says that "for the fast breeder to work...you probably need something like half a ton of plutonium. In order that it should work economically...it probably needs quite a bit more than one ton of plutonium. I do not like the hazard involved...(It) can release enough fission products to kill a tremendous number of people...if you put together two tons of plutonium in a breeder, one-tenth of one percent of this material could become critical."¹

RADIOACTIVE DISCHARGE

Reactors are able to contain over 99% of their fission products, but AEC standards allow 0.5%, in gaseous and liquid states, to escape into the immediate environment. The question is whether any level of radioactive contamination is safe. The 0.5% of radioactive effluent released is dissipated in the immediate biosphere, only to be concentrated as it ascends the food chains.

A study of the Columbia River, whose waters are used to cool the giant reactors at Hanford Atomic Works in eastern Washington, revealed that the radioactivity of the water was relatively insignificant while the radioactivity of the river plankton was 2,000 times greater. The radioactivity of the fish and ducks feeding on the plankton was 15,000 and 40,000 times greater respectively. The radioactivity of young swallows fed on insects caught by their parents near the river was 500,000 times greater. Also, the radioactivity of the egg yolks of water birds was more than a million times greater.



Kiket Island

Another study of Columbia River water revealed the presence of Zinc-65 in a concentration of 220 picocuries per liter. The isotope was also found in sizable concentrations in the bodies of people who consume beef and milk from cattle pastured on land irrigated by the Columbia, and even higher concentrations in those who drink the river's water.²

The Columbia River is already termed the world's most radioactive stream. It is well understood that radiation causes cancers of all sorts, including leukemia, shortening of life span, thyroid disorders, intra-utero and infancy deaths, weaknesses in body processes, increased susceptibility to disease, brain damage, sterility, and mutations.

As a result of criticism focused on low-level radioactive wastes particularly liquid wastes, during normal operation, the Minnesota Pollution Control Agency (MPCA) decided that standards were too lax, and announced in February that it will limit radioactive discharges from nuclear reactors to levels considerably below those currently allowed by the Atomic Energy Commission.

Special consultant to the MPCA was Ernest C. Tsivoglou, professor of sanitary engineering at Georgia Tech, who was chief of radiological

water pollution control, U.S. Public Health Service, from 1956 to 1966. "Tsivoglou says the AEC standards neglect the problem of multiple sources of radioactive pollution. He recommends that radioactive discharges be more severely curtailed so that there is more room to develop additional nuclear facilities...without endangering the public. Tsivoglou argues that radioactivity should be minimized so as to leave a reserve capacity in the environment in case of nuclear accidents, the resumption of nuclear weapons testing, or new findings concerning the dangers of radiation."³

Investigators found that nuclear reactors and associated fuel-processing plants were responsible for the increase of Iodine 131 in cattle in wide areas of the western U.S. Tsivoglou recommends that charcoal filtration of gaseous effluent be required to remove radioiodines which tend to concentrate in milk. The Northern States Power Company of Minneapolis terms these precautions as "unnecessary" and "arbitrary" because of the added

expense involved in maintaining Tsivoglou's suggested standards.

Even if it is possible to set standards which will protect humans from radioactive hazards, they may not protect smaller organisms. "There is very little information on the population and genetic effects of continuous exposure of natural communities of aquatic organisms to low levels of radioactivity."⁴

continued on page 22

Anyone interested in taking action against the siting of atomic power plants in our Northwest Washington area are urged to contact the following:

Mrs. Audree Kajfas
Samish Council of Campfire Girls
Mason Building
Bellingham, Wash. 98225
Tele: 733-5710

Save Skagit Bay
P.O. Box 459
La Conner, Wash. 98257

Helen Day
122 N. 4th
Mt. Vernon, Wash. 98273
Tele: 336-2034



GOOSE EARTH

July 12:

Spent the day reading the ecology issue of WIN magazine. If we could only get together enough to put a squeeze on our postular society. However, individual action and personal ethics need to be developed first. We need to create new life styles to reduce the waste and destruction of the environment. America consumes the most; and destroys the most.

July 17:

My system is always on "ecological overload" in the pain-vs-the-good-earth department, despite my resolution not to watch tv, nor read the established newspapers. Of course, real social ostriches don't read the underground rags either. That's where I found out that there are 7,000 T of arsenic in crumbling cement boxes in the Baltic sea. That is enough arsenic to kill the world's population 3x over. I should be in some wilderness cave trying to talk to the animals, who have DDT in their livers also to be sure. If I'm not a hermit feeling as I do about the earth and all its green and tender growing things then I sure must be a masochist to stick it out here.

July 18:

In spite of my respect for Adelle Davis' theories, I can't resist coffee. Why can't we get addicted (there's a word with bad vibrations) to things that are good for us; like getting strung out on yoga and wheat germ, or even kindness. Can't you see someone saying: "Man, I've got to do something nice to someone, real quick".

August 11:

About a year ago I gave up fiction for non-fiction. I had always prided myself on being well-read, and jokingly referred to my "library" as my only materialistic hang-up. As my concern for the world increased I began to be concerned about those parts of me that a printed page couldn't satisfy (shades of Portnoy). So I started to read such things as Bradford Angiers

How To Stay Alive In The Woods, Paul Shephard's *The Subversive Science*, and Adelle Davis' *Let's Eat Right To Keep Fit*. You might say I had a religious conversion to Totality: the inter-relation of man to the world.

August 17:

Spent the morning teaching my daughter how to bake a non-packaged cake, and thinking I should also be showing her wild edible food-stuffs. With our population now in excess of 200 million I'll never be morally comfortable enough to contribute another hungry mouth, let alone wish to feed it with my own DDT contaminated milk.

August 21:

What if the revolution really happened, where would I buy my birdseed? Yesterday I planted some millet in the garden, just in case, after all I am responsible (as The Little Prince was for his rose) for those birds I bought and caged. Now that I'm eating organically how can I neglect the health of those I'm responsible for, my pets. They are my "pets"; that makes me their "captor"; practicing slavery in my own home.

August 22:

Other than just writing these notes to myself, I formed a one woman citizens committee and wore a headband I had embroidered with "ban DDT" to the one-act plays on campus. "Some people will do anything for attention" was one overheard remark. Don't know what I expected though, someone to walk up saying: "Where do I sign?"

A Day In The Life:

Sample Newscast, August 23, 1969:

The ABM passed by one vote. San Francisco plans to haul its garbage 375 miles out to the Nevada deserts. The A.E.C. is going to allow "tourist viewing" of future atomic blasts. The

railroads are asking for "reservations" before shipping nerve gas. 250,000 men are being sent into combat who can't hear properly, due to a failure to protect their ears while in combat training. The federal government will resume off-shore leasing sales in spite of the fact that the wells are still leaking. (I'll never forget the dolphin, oil-covered and gasping, that I stumbled over while on a night stroll on a Santa Barbara beach).

September 6:

Saw a film at the Vancouver museum on the conservation of the B.C. salmon. It was a completely emotionally neutral movie, designed not to upset or offend. It was very obvious that the salmon were fighting a losing but "noble" battle. Lines like "these rivers were here before man, and now with the help of man" Sounds like our Vietnam policy. I asked the projector how old the film was...he said: "Fifteen years, and things haven't got any better". When is Goddard going to make an ecology flick?

September 10:

I wish I could load up all my friends who are ecology freaks, those "righteous livers", and transport them, a la Kesey, from small town to small town....street theatre.

September 13:

While having homemade pie at a small restaurant on Chuckanut Drive I overheard the patriarch of a Christian Kansas well-dressed, clean-sox family describe his trip to the World's Fair at Houston: "Well, I tell you I'll never forget it, never, it's the off-shore drilling capital of the world". Yes siree, right here in America, folks. Whatever happened to that gentle folk-hero Johnny Appleseed?

MOTHER'S JOURNAL

September 26:

Fear is a strange thing, and the paranoia it produces is stranger still. When I picked up the garbage pail there was a large spider in it. Respectfully, I emptied him out on the grass. Telling myself I had nothing to fear I bent to look closer (in hopes of understanding my unreasonable fear of spiders). But I killed him. Even as I did it I felt badly. But no excuses, I killed him out of fear.

September 28:

Took a nice long walk before class in someone's woods. It was then hard to drive into the "Inferno" as presented by Georgia Pacific. I envision the board of directors dancing fiendishly around a campfire of presto logs chanting "Who's afraid of Rachel Carson, Rachel Carson, Rachel Carson, Who's afraid....." Too bad the great power (brainwashing done here) of Madison Ave. couldn't be used constructively. Imagine a billboard saying not "Keep America Beautiful. Cut Your Hair", but "I love living, don't you wish everyone did. Stop Pollution".

November 1:

Finished reading McLuhan's *War and Peace In The Global Village*. For all of man's integrated knowledge, he has no answers. I find myself appreciating his academic touches though, but resenting the elan with which he delivers a wounding blow to the future. But then he is an analyst, not a messiah. If I could write a book on ecology I'd disguise it as a *Valley of the Dolls*. I mean, who really wants to read about dying salmon.

November 5:

Feeling very defeated today. There are so many worthy causes, I have little time or money for them all. All the various organizations flouting their

causes, if I don't tourniquet my emotions I'll be just another cog, and ineffectual. I am in a position where I can do something. How can anyone who is struggling with his own right to exist have time to worry about the proposed land development (greed) near Deception State Park when they're still trying to get enough to eat, or a job, or even the right not to be called "nigger". Yet the smug middle class worries mainly about buying the right kind of detergent or booze. If I retreat from this awareness of the ecological crisis (and there is only one).. but I can't. I want to see bluebirds next spring, and get unpolluted oysters out of the bay.

November 11:

Today I feel better. Somehow this whole struggle against pollution of the air, water, land and mind is all against negative forces. It almost makes me believe in the Christian dichotomy of good and evil; if only there were a "Satan" whose assassination could return the earth to her good graces.

November 12:

"The one who has come to question himself has cared for mankind" --Kenneth Patchen. He said that about fifteen years ago, I think. Was thinking back on that organizational meeting that I attended in Seattle on Friends of the Earth. I know why I left, it was like the old SDS power hassles all over again. Together, the only way. Maybe I'm wrong; they did pull off a successful environmental fair at the U.

November 24:

I can remember my mother saying "He's wild" and shaking her head, that particular person being damned in her eyes forever. I spend a lot of my time lately trying to be wild,

undomesticated, natural, getting back.

November 28:

Love could be a panacea; if love was a closed circle that isolated and protected me from the world. As if I could lie carefree in loving arms while outside a chickadee convulsed because of accumulated hydrocarbons in its little body; As if I could eat grapes in a joyful Bachannal knowing what Cnavez is trying to do; or overeat once having seen photos of Biafra, or buy Richfield gas knowing their connection with the Birchers. Where is there a pregnant woman who will not remind me of the hazards of peacetime nuclear testing; where is there a young man that I cannot help but wonder if the government will use him to kill or be killed?

December 3:

It came on me so quickly, I hardly noticed that back a few pages I used "we" and "us" and "our" movement. Like the edges of a wound come together. Am I more than just an interested and concerned observer; am I part of the movement; not unless and not until I start speaking of "our" revolution. It's as delightful to me now as the first, secret, repeating of a loved one's name; and as tender and scary as saying "I love you" for the first time...Viva, Viva La *Revolucion*. And what is this revolution, movement, of which I now call myself a part (carefully/boldly)? A youth/drug movement, a student-revolutionary, A Yoga and Krishna/ite, a health food-communal thing, an educational reform, an ecology freak thing... no particular pigeon hole...all roads lead to Rome. I want to be part of a whole, not a member of an alienated sect or splinter group. I want us all to come together and worship (that's what I said) the earth, love and protect it and love and protect one another. Why not?



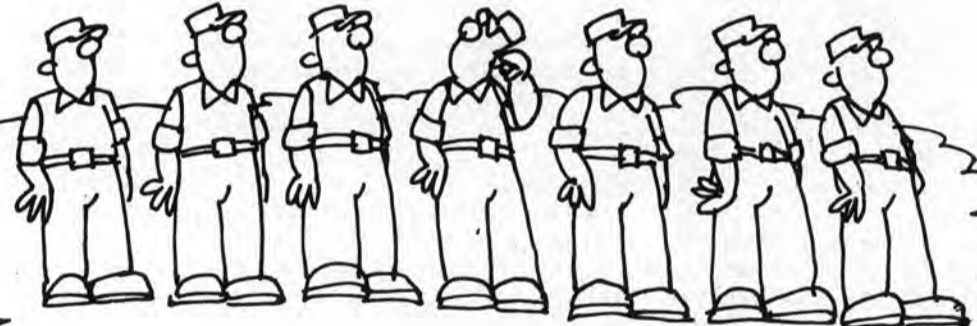
BIG MAC

CAN'T BUST 'EM

CAN'T BUST 'EM



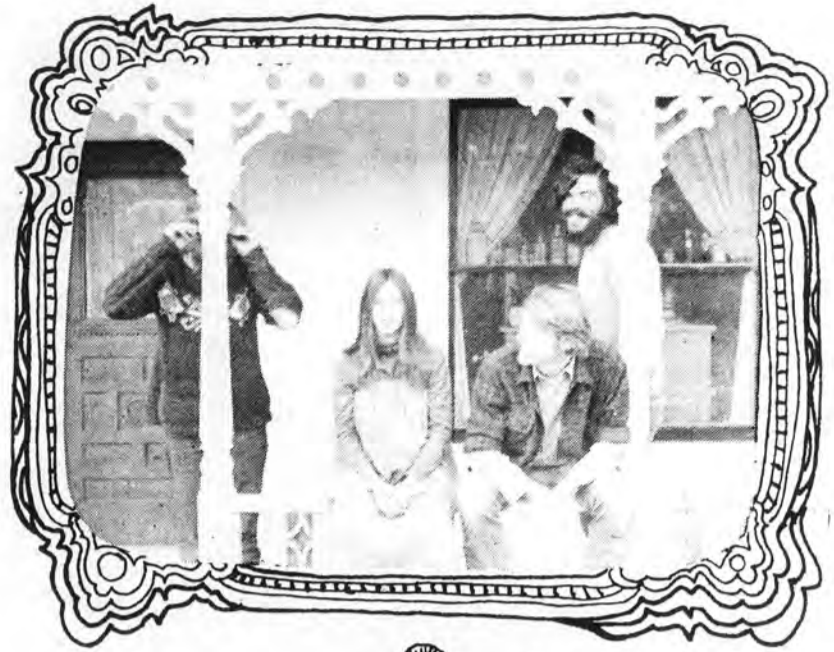
SHEE-IT... HERE I AM TRYIN' TA PAY OFF A BUST AND IF I LOSE MY ~~APPRENTICESHIP~~ APPRENTICESHIP I'LL GET DRAFTED.



WHICH ONE IS ME?

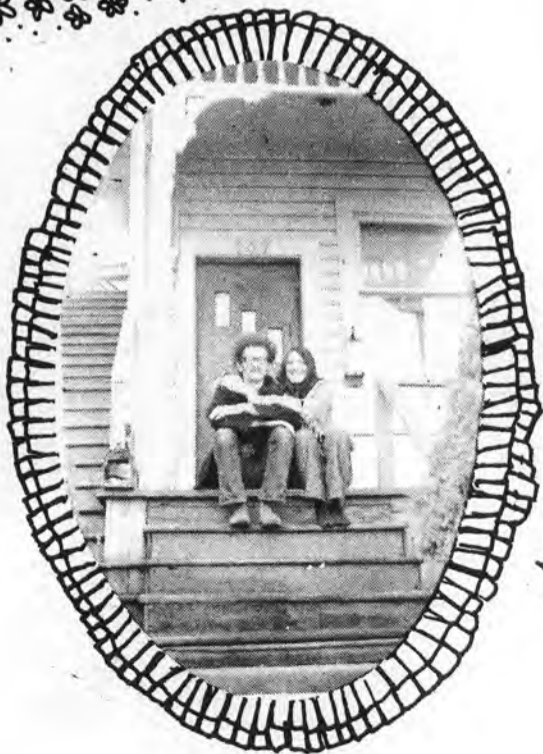
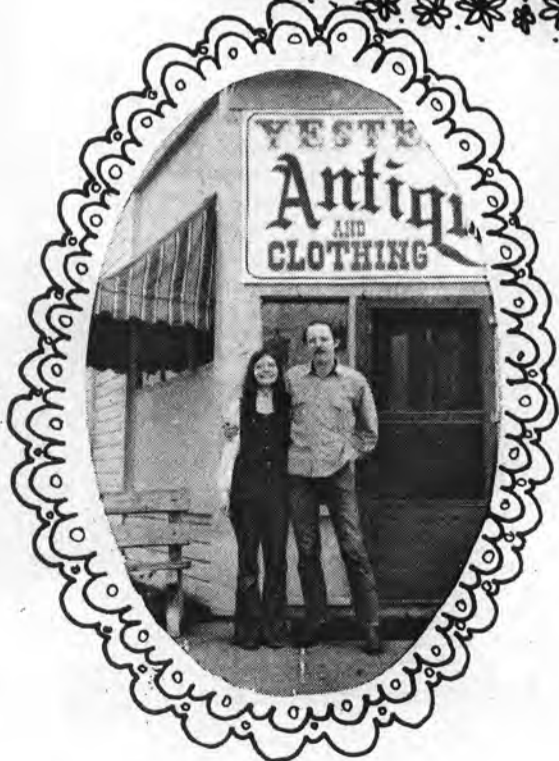


© NORTHWEST PASSAGE 1969



FROM THE

ALBUM



OUT OF THE

MOLASSES JUG

Toby's Christmas Bread
 1/2 cup sugar
 1 cup hot water
 1/4 cup crushed cardamom seeds
 3-5 c. flour
 1 tsp. salt
 1 tbs. or 1 cake yeast
 1/2 c. raisins
 1 c. candied fruit
 1 egg 1 1/2 tbs. butter

Combine butter, hot water, sugar, salt. When water cools to lukewarm, add 1 beaten egg and the yeast. Sift the cardamom with the flour. Add flour until dough is kneadable. Powder raisins & candied fruit & add to mixture, knead to the consistency of an egg-lob. Pat in bowl, let rise until double. Pound down, form into 2 round loaves on cookie sheets. Let rise again until double. Bake @ 375° for 40-45 minutes

Well, here it is winter again and most folks are giving each other a hand and showing what they have. But somebody did a selfish thing— they stole some of the things belonging to Bob and Tina Kyle that were integral parts of their trips. Like Bob's Martin guitar and their good stereo. Bob says it isn't so important if the 2 winter coats, riding boots, and food that was taken was returned, but they're missing spiritual food. Their music is really missed. Whoever has it—if you realize the affect your action is having on a peaceful community of unlocked doors, and sharing rather than stealing. I'm sure you will return their trips.

Pipcorn Balls!!!
 Combine:
 1 cup dark molasses
 1/2 cup sugar
 1 tbs. vinegar
 1/2 tsp. salt

Boil until brittle when tried in cold water. Add 1 Tbsp. butter.

Pour over:
 6 c. popcorn
 1/2 to 1 cup salted peanuts

Stir gently until evenly coated; when cooled handle, press into balls.

Robbie Squash Muffins—original Robbie recipe invented by Robbie.
 4 or 5 or 6 cups cooked SQUASH
 2 or 3 eggs
 Coupla cups milk
 Throw in some RAISINS
 Nuts are Nice, too.

Mix all this stuff up. Then put in spices like cinnamon, nutmeg. Chop up a whole fresh lemon into tiny pieces. OK. Orange peelings are good, too. Sugar to sweeten—about 2 or 3 cups, I think. Then flour—2 cups at a time 'til the muffins get as thick as you want them to be. Add a coupla tsp. baking soda and some good (Note: they taste esp. good cooked in a woodstove at Oyster Creek.)

YUM EGGNOG-YUM
 SMASH BERRY OR BLEND w/ liqueur until smooth:
 1 cup fresh milk
 2 egg yolks
 3 tsp. sugar
 1/4 cup powdered milk
 pinch salt
 1/2 tsp. vanilla

And, of course, you can add - BOONZE

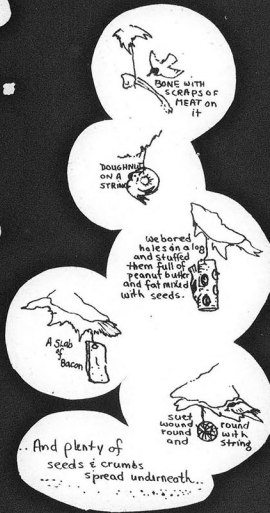
WINTER TIME TIP TO KEEP WINDOWS UNFROZEN
 Put some salt in a tin and pack its cover full of holes with an awl. Now one by one, open the windows and shake some salt on the lower part of the sash where the bottom of the window rests. The salt will keep it from freezing fast. Course kitchen salt is best.

WHEN GLASSES STICK TOGETHER
 If this happens, you may break them even out yourself, if you struggle with them. Instead, place the bottom glass in hot water and fill the top glass with cold water. They will separate like the black sheep from the white on the day of judgement.

If enough people see-but no experience the spiritual reality in which men are united, then there will be Peace - A. Huxley

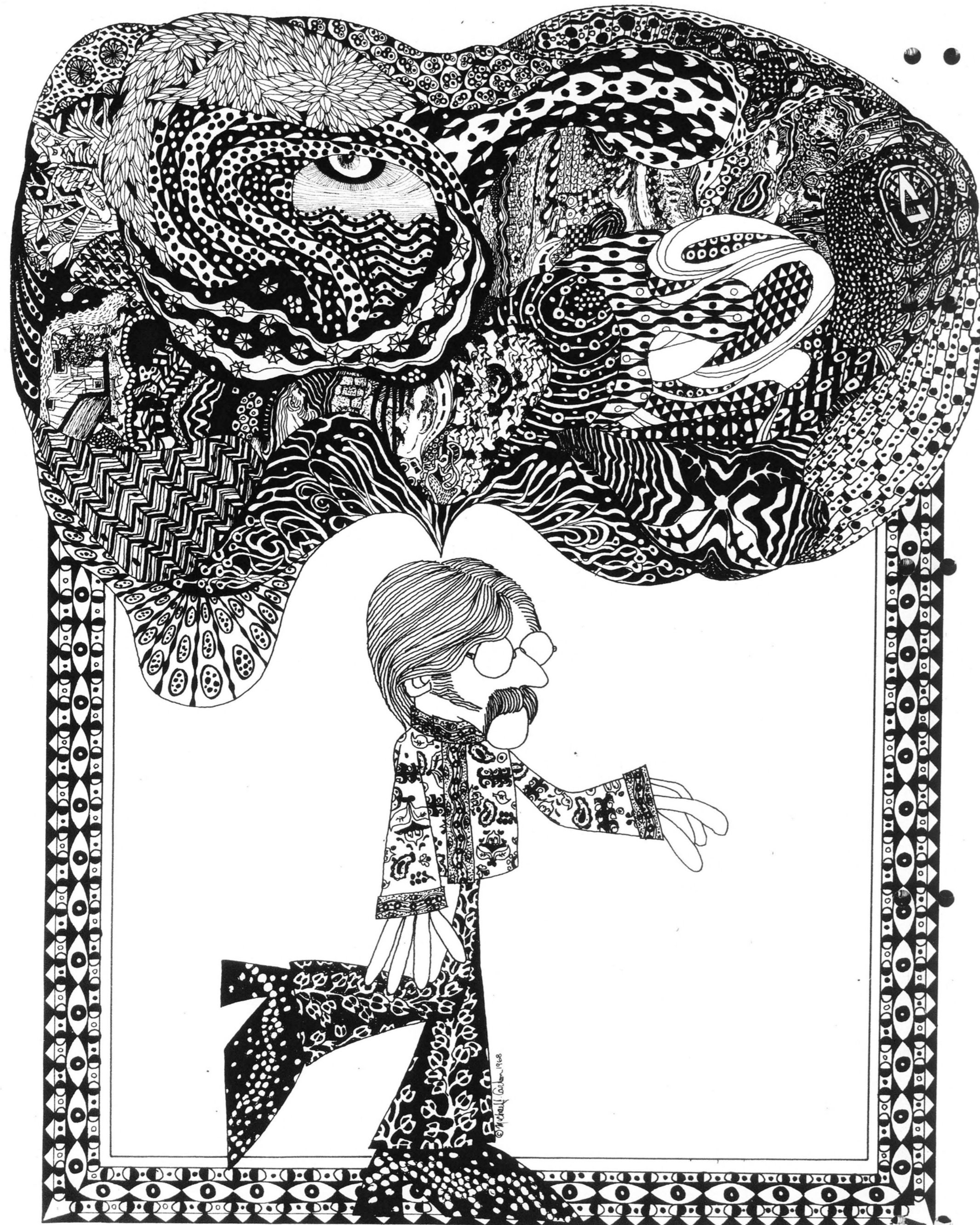
If peace is to be maintained, it must be by brave men who will carry their life in their own hands and will not seek another man's life - Emerson

The Prince of PEACE hath expressly Prohibited his Children all violence - Barclay



A BIRD'S CHRISTMAS TREE II





go placidly
amid the noise
= haste
and remember
what peace
there may
be in
silence . . .

desiderata.



MORE...



With special thanks to:

- Stan Tobiason
- Billy Schwab
- Dana Dickinson
- Bruce McDonald

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wea
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The
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also
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goal
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THE ELECTRIC GRAPE & GREENHOUSE EFFECT

by steve overstreet



CARLSON © N.W.P. 69

One might paraphrase Mark Twain and say that "Ecology is like the weather; everyone talks about it, but no one ever does anything about it." Though such a remark might be considered well and pungently said in the proper and/or academic and/or cocktail party circles, it would still be somewhat inaccurate. The truth of the matter runs more like this -- not only are more and more people talking about ecology these days, but they are also changing the weather as well. This process works in somewhat the following manner.

We, and all other animals, breath in oxygen gas and breath out carbon dioxide. Green plants in turn take in carbon dioxide, use it with solar energy to form plant material, and as a by-product of this photosynthetic process, release oxygen. Thus plants and animals theoretically exist in a balanced cycle, giving off the proper waste products and taking in their proper gases. However, man has now entered the picture in his typically heavy-handed manner. Man is a goal-oriented creature, and as such, he constantly labors. However, instead of

just breathing, and using the resultant energy that oxygen releases from his own and/or his domestic animals' muscle, man has found certain expedient shortcuts, and put them into widespread use. Man extends his own muscle capacity through the utilization of heat energy, which he in turn converts to mechanical energy (through steam and internal combustion engines) or into electrical energy through mechanical means. In any event, to get this energy, man primarily burns fossil fuels, principally coal and liquid petroleum.

Now, as we all know, one of the primary products of any combustion is CO₂. By burning the vast quantities of fuel available, and doing this as rapidly as is technically and socially possible, man has poured a presently huge and ever increasing supply of CO₂ into the atmosphere. At the same time he is doing this, he has been cutting down untold numbers of green photosynthetic plants and whenever possible, rapidly covering more and more denuded ground with concrete and asphalt, which almost eliminates the possibility of even chance growth.

Thus, as time goes on, the imbalance of diminishing O₂ and increasing CO₂ goes on. As the CO₂ builds up in the atmosphere, it eventually begins to demonstrate one of its more interesting properties, that of holding radiant heat within our atmosphere.

Soon, it has been postulated by remarkably cool scientific people, this atmospheric heat will increase so much that our planet will irreversibly warm up to finally melt the Polar Ice caps. This will cause the oceans to rise by between 200 and 400 feet, because it will release water now held in the form of Polar Ice. This will of course flood our coastal areas whereby most of our cities and prime agricultural land are presently located.

This heating of the planet by trapping sunlight in the CO₂ saturated atmosphere is called "The Greenhouse Effect."

I learned about the Greenhouse Effect while I was in Honours Biology. It was also during this time that I got a significant insight into our society by an insignificant joke that runs like this: "What is purple and hums?"

The answer: "An Electric Grape."

When you think about it, an Electric Grape is a frightening thing simply because it is a technological, scientific and engineering possibility in this day and age. It also happens that we live in a culture which is obsessed in actually developing anything technologically possible--be it an electric toothbrush, a moonshot, or an artificial re-arrangement of a given DNA molecule. In such a society an Electric Grape could become a highly desirable consumer item. For one thing it is useless. It is just a small thing that hums, presumably by using the energy cell of an electric wristwatch. It is so detached from the real world in which we live--it toils not nor does it spin usefully, nor does it make one iota of difference. All it would do is enable a certain number of engineers, salesmen and others to be gainfully employed in the manufacture and distribution of this product. In turn the product itself would be every bit as vital as the lives of those spent in creating and cost-accounting it.

Worse yet--you begin to realize that

cont. on pg. 23

DDT, LIFE CYCLES & MAN



LNS

by christopher condon

Once upon a time, so the story begins, man lived in a world of infinities. The sky was vast beyond comprehension; the ocean was bounded only by strange continents whose forests and prairies extended beyond the wildest rumors and fantasies which they fostered.

As the pages of man's discovery of the earth unfolded, these infinite dimensions became finite, but finite in the sense that there are a finite number of grains of sand on a beach, finite but yet so vast that the boundaries were unapproachable.

So vast that billowing clouds of smoke were diluted to apparent nothingness, discarded chemicals were "flushed" away in bays and streams, insecticides "disappeared" after they did their job.

Indeed some pollutants do disappear; they are immobilized in chemical combinations or they decay into harmless substances. Others last, often in toxic form for long periods of time, detectable only by the most sensitive and refined equipment and measured in parts per million.

The fact that these pollutants dissipate to such minute levels is no guarantee of safety, as industries and so called pollution control boards which set "safe" pollution levels would have you believe. Nature has ways of circulating pollutants through global, long-term ecological processes that can concentrate these substances hundreds of thousands of times above levels in the environment with disastrous results in the ecological systems in which these concentrations occur.

The most publicized villain in the pesticide controversy is DDT; there are many reasons for this: it is relatively easy to detect even in minute quantities; it is by far the most widely used pesticide; it is toxic to a wide spectrum of animals including man,

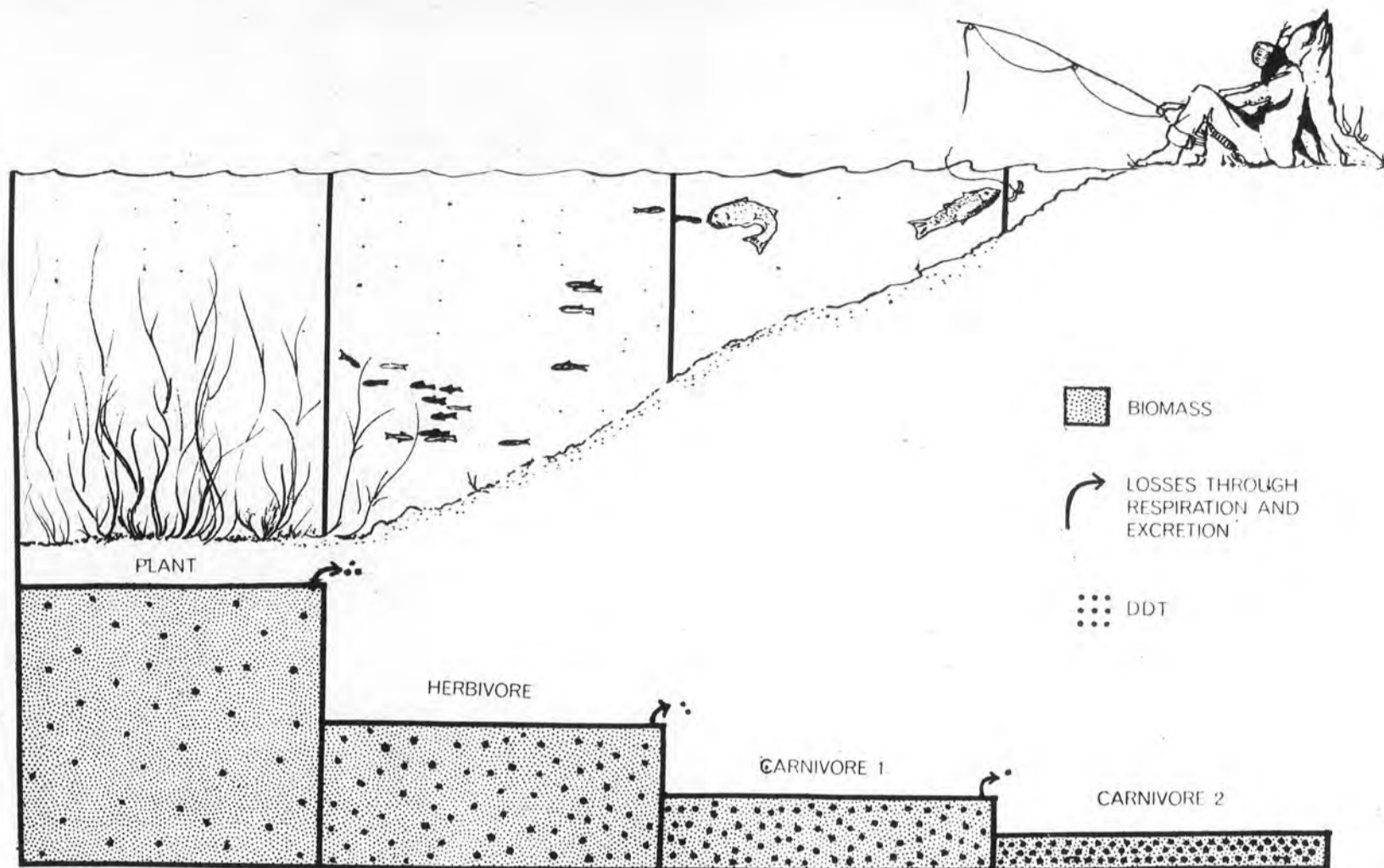
and its effects on ecological systems are most apparent. It should be kept in mind, however, that the things we refer to in this discussion like global distribution of DDT and the ways in which it concentrates itself are also applicable to a wide range of other pollutants including radioactive wastes. A partial list of these pollutants includes DDD, DDE (chemical derivatives of DDT), Toxaphene, Aldrin, Endrin Heptachlor, Dieldrin, and BHC, all of which have different properties in terms of their toxicity, effect upon their environment, and bio-degradability (whether or not they can be decomposed).

The use of DDT became widespread during WW II in controlling body lice and therefore typhus. DDT quickly became a universal weapon in agriculture and in public health campaigns against disease carriers throughout the world. At this time, DDT has thoroughly permeated almost every facet of our environment. It is found in the air of cities, in wildlife throughout the world and in the fatty tissue of man, from Arctic Eskimos to the inhabitants of overcrowded, undernourished India, where concentrations in man reach their highest levels.

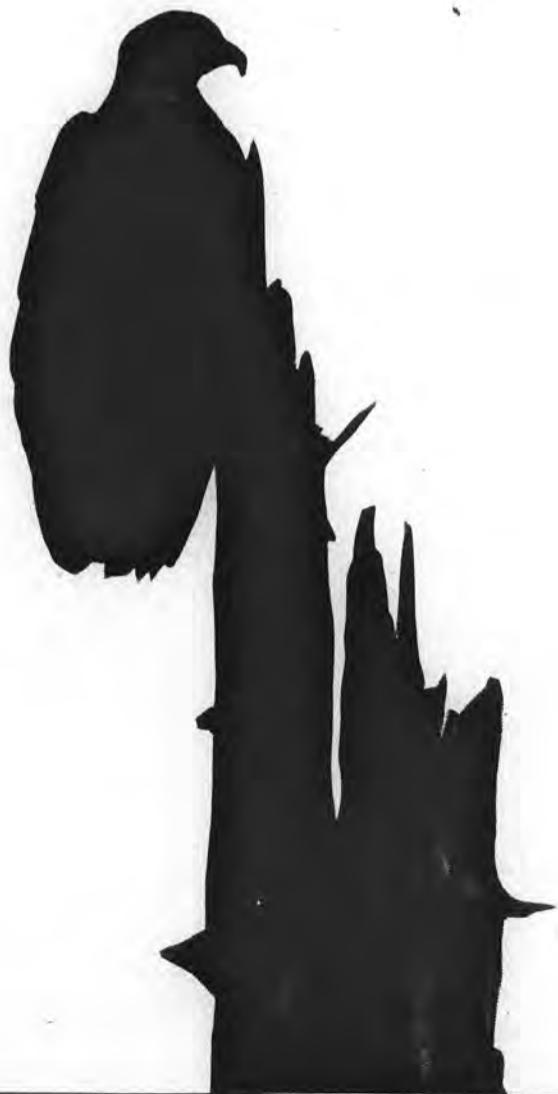
There exists a considerable amount of evidence that DDT is carried throughout the world primarily by air currents and secondarily by water currents. When DDT is sprayed, even at low levels, about 50% of it does not reach the ground, instead it is dispersed in tiny crystals throughout the atmosphere, in much the same way as pollen grains, circulating through the atmosphere and ultimately being deposited in rainfall after global voyages which sometimes circle the globe in 15 to 25 days.

Oceanic currents are also instrumental in carrying DDT to the





The toxins come home to roost



far corners of the earth. DDT is almost insoluble in water, but algae and other organisms in the water absorb the pesticide in fats where it is highly soluble. The constant absorption of DDT by marine organisms and plants makes it possible for more DDT to be absorbed in the water. Therefore water, which never contains more than a trace of DDT, can continuously transfer it from deposits on the bottom to organisms which begin the process of concentration.

Because DDT is an extremely stable compound which breaks down very slowly in the environment, repeated sprayings of an area leave residues in the soil and water basins. A study by Geo. M. Woodwell, reported in the March, 1967 *SCIENTIFIC AMERICAN* found that a marsh along the South Shore of Long Island which had been sprayed with DDT for 20 years to control mosquitoes had up to 32 pounds of DDT residue per acre in the upper mud layers.

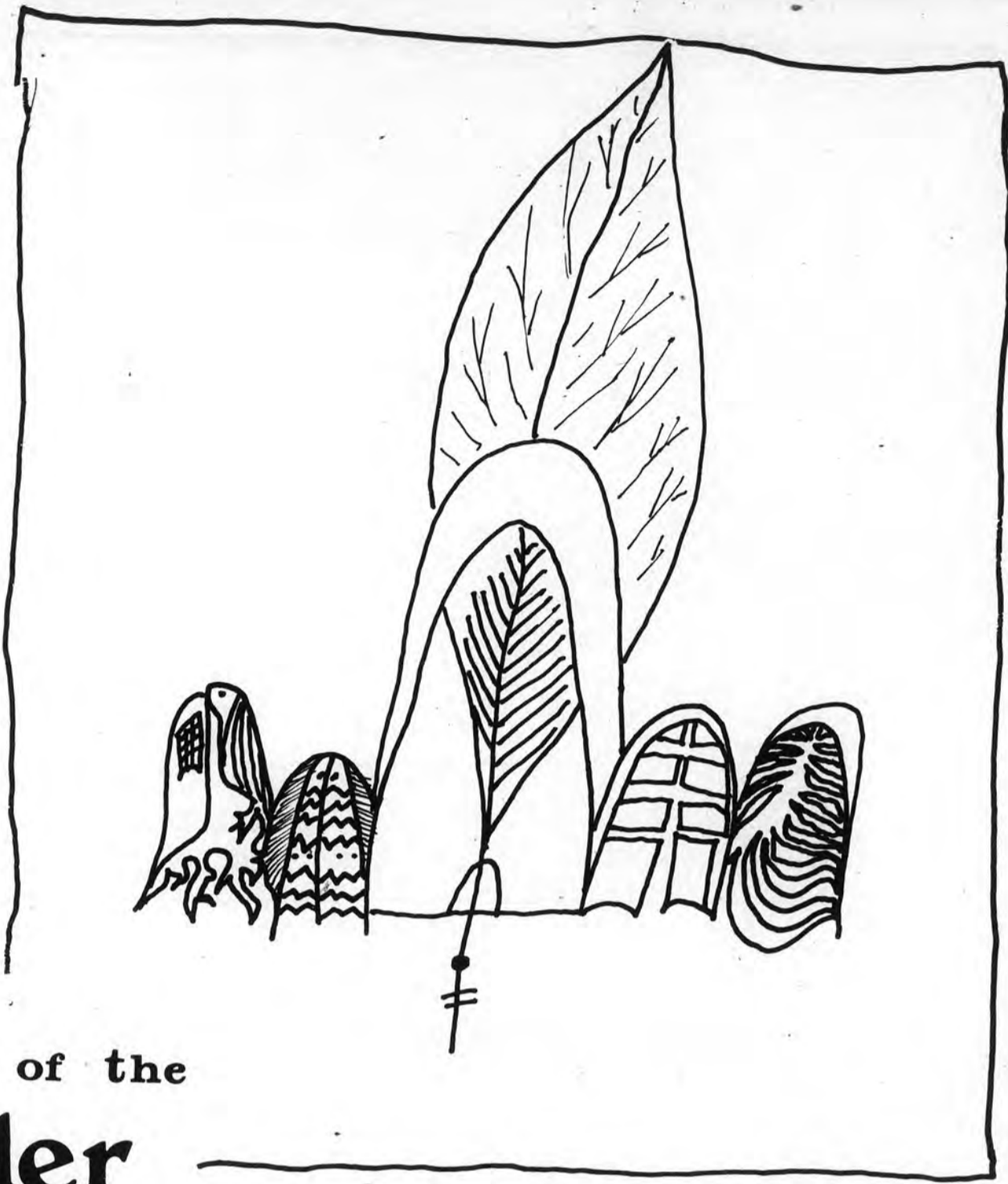
This study also showed a food chain which concentrated DDT to a most alarming level. The plankton in the area had a DDT concentration of 0.04 parts per million. Minnows contained 1 ppm and gulls in the area contained as much as 75 ppm. The study states:

"The damage from DDT concentration is particularly serious in higher carnivores (like man). The mere fact that conspicuous mortality is not observed is no assurance of safety. Comparatively low concentrations may inhibit reproduction and thus cause the species to fade away."

As important as the effect DDT may have upon a particular species is the effect upon the ecological system of which the particular species is a part. It has been clear for some time that the shotgun effect these pesticides have not only attacks the target pest, but also predator and competitor species which normally limit the size of the pest species. Further, under constant exposure to a pesticide, the pests often develop resistant strains which without the pressures of predators or competitors have "population explosions". This requires an ever-escalating chemical warfare to keep them under control, whose cost can be nothing but self-defeating in the long run.

One of the costs is wildlife, notably carnivorous birds such as hawks, sea gulls, and our national symbol, the eagle. Others are destruction of food webs which contribute to the pollution problem by failing to utilize waste materials which then accumulate. Another is the reduction of the photosynthetic activity of marine phytoplankton upon which all marine life depends.

The most important cost from our standpoint, of course, is man, who even if he can survive DDT will find himself in an environment considerably less pleasurable for its lack of diversity, lack of chirping birds in the morning, lack of salmon in the streams, like a sloppy tenant living in a house, the earth, being smothered by his own excretion, unable to move because there is no place to go.



to the future life of the
salamander

The Salamander opens a door in the
roots of the tree.

The tree is turning in the night.

The Salamander thinks he is in heaven.

When he sleeps the sun begins waking up
the leaves

From the very top branch.

Leaf by leaf the sun steps down
into the roots.

The Salamander takes ten centuries
to open each eye.

- Robert Suid

reviews

poetry film

Keith Abbott

STONES by Tom Clark

Tom Clark's poetry has pretty well run the gamut of styles available to a young, hip poet writing in America today. This is not to put him down but just to suggest his literary accomplishment, since he is capable of taking a stance towards his poems and using it to write a poem without sounding too much like the poet he has stolen it from. Take, for example, the prose poem:

BASEBALL

One day when I was studying with Stan Musial, he pointed out that one end of the bat was fatter than the other. "This end is more important than the other," he said. After twenty years I learned to hold the bat by the handle. Recently, when Willie Mays returned from Europe, he brought me a German bat of modern make. It can hit any kind of ball. Pressure on the shaft at the end near the handle frees the weight so that it can be retracted or extended in any direction. A pitcher came with the bat. The pitcher offers not one but several possibilities. That is, one may choose the kind of pitch one wants. There is no ball.

(Anyone interested in the prose poem form is advised to dig up an old New Directions 14 annual. Or even a new one.)

Clark's poems range from that kind of opacity to almost indistinct poems of great speed and pressure. The direction that his poetry seems to be going is the clear one motion lyric (derived from William Carlos Williams' early poems and, more recently, Jean Follain's poems in French). In these poems the delicacy and beauty of his perceptions are placed in a continuous stream of words and they give rise to a good feeling of wholeness, not fragmentation that some of the earlier poems, "You I-V" and "Penmanship" produce. I quote the last poem in the book: "Nimble Rays Of Day Bring Oxygen To Her Blood."

After the sponge bath
Spice cake and coffee
In a sky blue china cup

Tiny clouds float by
Like bits of soap
In a bowl of very blue water

A happy baby sleeps
In a silky chanber
Of my wife's lovely body

A leaf spins itself
The leaf's a roof
Over the trembling flower
Everything's safe there
Because nothing that breathes
Air is alone in the world.

flam

bernard weiner

aesthetic pollution

Joseph Strick's "Ulysses"
Karel Reisz's
"The Loves of Isadora"

In this special pollution issue of the Passage, I thought I'd spend a few paragraphs discussing the prevailing pollution in the arts, and how this ties in with the craft (or art, if I really want to sound snobby) of film criticism.

I raise the issue since many persons have confronted me recently about my critiques and what they suppose to be an overconcern with negativism.

Let me put it as simply as I can. Most of what appears on the screen is nothing but garbage, mostly from Hollywood, but-in an age of American imperialism-the garbage is now world-wide in origin. As I said in my very first column for the Passage, I don't intend to spend much time discussing garbage; there are plenty of sources you can go to for garbage-reviews. (You are what you write?)

Those films I intend to spend time on are those which are on the fringes or at the center of the artistic realm--on a continuum, the "good"-to-"great" films. Since there aren't very many truly great films, this means we are forced to deal with good films which would pretend to greatness.

To overpraise good films would be to lower the criteria for greatness, and perhaps to negate the chances for ever getting any great films at all. If this be negativism, so be it, but I refuse to overpraise decent films motivated by decent attitudes simply because they are politically or socially "relevant" and ideologically correct. Art must be judged not ONLY by where it stands in the history of its time, but how it stacks up against past, present and future art of its genre. Thus, in my film critiques, I try always to place the work both within a purely aesthetic context AND a social context.

What does experiencing and understanding art do? It focuses our head, spirits us to higher realms of cognition and emotional/metaphysical ecstasy. It is, in the fullest sense of the word, educational. Art criticism must complement this educational effort, anything less is a submission to the lower-levels of vulgarity.

I realize all this is somewhat vague, but perhaps it will serve as a partial explanation of what this column is attempting to do, as imperfectly as it

turns out in practice. (For those interested in going into more depth on this, check out the Free U workshop on film criticism in February 6.)

★★★★★

On to two films which snuck into Bellingham last week: Joseph Strick's "Ulysses", and Karel Reisz' "Loves of Isadora". (I reviewed John Cassevetes' powerfully moving film "Faces" last Spring.) Both are "good" films; both are failures.

One has to admire Strick's courage in attempting to film what is undoubtedly one of the most creative and influential books of the modern world. But admiration for courage can't blind us to the fact that James Joyce has been violated, in the most carnal sense of that term.

In some ways, it would be equivalent to a film on the Bible made up only of the sex-scenes. Something major would be irrevocably lost: the inner meaning, nuance, tension, artistic tautness, as well as the obvious spiritual message.

And this is what Strick has done with Joyce's wonderfully rich novel: snatched the few key "sex scenes", as it were--the Nighttown sequence, Bloom's masturbating in the presence of Gerty McDowell, and Molly Bloom's erotic soliloquy--ties them together in a loose pastiche, and pretends that he has done justice to what it was Joyce was after.

Many of the scenes are handled fairly well, but the overall effect is like biting into a luscious-looking pear which has had all its essential juices removed, or making love to a beautiful piece of frigidity. It ain't got much Satisfaction.

Milo O'Shea as Bloom is more-than-adequate, and Barbara Jefford as the fading, sensuous Molly Bloom is beautifully evocative (her soliloquy is worth the wait).

I might almost propose an aesthetic parallel to Lord Acton's famous dictum concerning power: films made from novels tend to be inadequate; films made from great novels tend toward absolute inadequacy. Perhaps it will be possible someday to create a better film-version of Joyce's work;

somehow I doubt it. There are some art-works--particularly the great ones--which simply cannot re-create themselves in another media. But, until and if that better version comes along, we are forced to accept Strick's lukewarm attempt as the only thing going in its line.

The major thing wrong with "The Loves of Isadora" is that it tells us very little about Isadora. Isadora Duncan was one of the few geniuses America has produced; a precursor of many of the developments in modern dance, indeed in modern art in general. The major error of the film is that it assumes that its audiences already know all about Miss Duncan's aesthetic contributions, her biography, her place in the celestial universe of art.

But Miss Duncan died in 1927, which means that one has to be at least in one's 60's, with some remembrance of Miss Duncan and those days, to really appreciate the film. For all the average viewer gets is a fairly typical portrait of what might well appear to be little more than a kooky artist-type, promiscuous at that.

As with "Ulysses"--and other films discussed in these columns recently--what we get is a collage of fairly predictable sexual events (Colorful! Exciting! Erotic!) with little development of character, little explaining, ultimately little meaning.

Aside from the fact that she can't dance (thus nowhere giving us any indication of Miss Duncan's fantastic genius), Vanessa Redgrave is thoroughly appealing in the lead role. Would that she had had the film story of Miss Duncan worthy of her immense talents; what a way she can use her face, and her voice! Sadly, she is mostly wasted in this jerky little bauble.

(A final word: the film was originally three hours long with intermission; it is shown commercially in a severely-edited 130-minute version. Perhaps the original version, entitled simply "Isadora", filled-in some of the important gaps criticized here. Another rape of a relatively unprotected medium.)



ATOMIC

continued from page 9

SPENT NUCLEAR FUELS

Every so often, radioactive spent-fuel must be removed from the reactor core. It must be transported long distances to reprocessing plants where radioactive poisons, including plutonium are removed to leave a purified uranium fuel for re-use. A ton of spent fuel in reprocessing will produce from forty to several hundred gallons of waste. This substance is a violently lethal mixture of short-and long-lived isotopes, which produce so much heat that it will boil for several years.

After reprocessing, these extremely dangerous wastes are then transported to and stored in huge steel concrete-walled underground tanks. Two of these perilous substances, strontium 90 and cesium 137, continue to radiate for over 1000 years. In the words of AEC Commissioner Wilfred E. Johnson, we are talking of periods "longer than the history of most governments that the world has seen." These containers store anywhere from 300,000 to 1,000,000 gallons. Dr. Joel Snow, nuclear physicist of the University of Illinois, states that "a single gallon of waste would be sufficient to threaten the health of several million people."⁶

Of 200 such storage tanks in the U.S., 151 of them are situated in Washington State alone. Eighty million gallons of highly radioactive waste are presently stored in these giant tanks. Some of these tanks are known to be leaking their poisons. One tank at Hanford developed a leak from a 2-foot bulge near the bottom. It drained 60,000 gallons into the ground before discovery, the AEC has acknowledged. This occurred only five years after its construction. Two more have been found to be leaking and others are suspect. In 1968 the AEC spent \$2,500,000 to replace failed or failing tanks at Hanford.^{6a}

THERMAL POLLUTION

The tremendous amounts of heat produced by atomic fission must be removed to prevent a meltdown of the core. The most widely used method of cooling atomic plants is the once-through condenser cooling system through which large volumes of water are passed. The water has to be taken from a natural body of water, such as a river or lake. After the water passes through the reactor core it is returned to the body of water from which it came 11 to 23 degrees F. hotter than it was on intake. This process causes a significant change of overall temperature in the body of water used for cooling purposes.

Thermal pollution greatly effects immediate aquatic communities. An example of the dependence of an animal on suitable water temperatures can be described by the effects of temperature on the life processes of Pacific salmon. "These fishes thrive within temperature ranges that fall between about 38 and 65 degrees F., depending upon the species of fish, acclimation conditions, stage in the life cycle, age and season of the year. Both above and below these ranges are temperature zones in which salmon

can exist but only at the expense of such processes as growth, migration, feeding, and maturation. Depending on duration of exposure, season, condition, life processes, and other factors, Pacific salmon can be killed at temperatures beginning in the range 56 to 77 degrees F. Gradual temperature changes are tolerated much better than sharp changes at all temperature levels."

The waste heat of power generation in some cases might be used to increase production of fish and shellfish, such as trout and oysters, but more waste heat is expected to be produced by nuclear power plants than can be used effectively by aquaculturists in both controlled and natural environments. "In the warm season of an unusually hot, dry year when the water reaches its maximum temperature from atmospheric heat alone, a further rise of 2 or 3 degrees F. might be sufficient to kill some forms of aquatic life."^{5 b}

If plant expansion continues at its present rate, by 1990 more than half of all the river run-off in the U.S. will be required for cooling. Various cooling system designs, including cooling ponds and cooling towers, are available to direct waste heat into the atmosphere rather than into the water. These systems would eliminate the risk to aquatic communities, but to date the power companies have resisted the cost of such devices.

No one knows what long range effects these systems will have on the ecology. Considerable amounts of water vapor released into the atmosphere may bring an increase in annual rainfall. Simply by its nature, this type of activity would be classified as air pollution and come under the regulations of the Northwest Air Pollution Authority. It has been suggested that atomic power plants be situated in arid waste lands, such as east of the Cascades, where increased rainfall would be beneficial to land use.

authorities had to seize all milk and growing foodstuffs in a 400 square mile area around the plant.

ATOMIC ACCIDENTS

"A disturbing number of reactor accidents have occurred with sheer luck playing an important part in averting catastrophe, that seem to have been the product of incredible coincidences. On October 10, 1957, for instance, the Number One Pile (reactor) at the Windscale Works in England malfunctioned, spewing fission products over so much territory that authorities had to seize all milk and growing foodstuffs in a 400-square-mile area around the plant. A British report on the incident stated that all of the reactor's containment features had failed. And, closer to home, a meltdown of fuel in the Fermi reactor in Lagoona Beach, Michigan, in October, 1966, came within an ace of turning into a nuclear "runaway." An explosive release of radioactive materials was averted, but the failures of Fermi's safeguards made the event

in the words of Sheldon Novick in *Scientist and Citizen*, "a bit worse than the 'maximum credible accident'."^{7a}

In all there have been some 270 accidents involving nuclear reactors since 1945. In 1957 the AEC issued a study known as the Brookhaven Report that attempted to assess the probabilities of a "maximum credible accident" and the potential consequences. Some of its findings were stupefying: From the explosion of a 100-200 megawatt reactor, (somewhat smaller than the 1000 megawatt proposed for Samish Island) as many as 3,400 people could be killed, 43,000 injured, and as much as 7 billion dollars of property damage done. People could be killed at distances up to 15 miles and injured up to 45. Land contamination could extend over far greater distances: agricultural quarantines might prevail over an area of 150,000 square miles, more than the combined areas of Oregon and Washington.^{7 b}

Of prime concern here are not only component and instrumentation failures but also human causes. The ease with which havoc can be raised by simple acts of sabotage cannot be overlooked. Only a conventional explosion, which ruptures the reactor mechanism and its containment structure, would be needed to create a Brookhaven type "maximum credible accident." With the abundance of revolutionaries and psychopaths, it seems that extensive safety measures should be taken, but many manufacturers and utility operators have resisted the idea of producing "redundant safeguards" on the grounds of excessive cost.

...a major earthquake in the near geologic future.

Reactors and storage tanks are also vulnerable to natural catastrophes such as earthquakes. Near Bodega Head in California, a local group effected cancellation of Pacific Gas and Electric plans to situate a reactor squarely over the San Andreas Fault, an area of known seismic activity. Dr. David Pevear, professor of geology at Western Washington State College, says that the West Coast of the U.S. will experience a major earthquake sometime in the near geologic future. Just when and where is an uncertainty, but there is no doubt in his mind that one will definitely occur. The siting of atomic power plants in areas of high earthquake potential should be viewed with undivided concern.

"Despite the AEC's own assertion that as much as \$7 billion in property damage could result from an atomic power plant catastrophe, the insurance industry...will put up no more than \$74 million, or about one per cent, to indemnify equipment manufacturers and utility operators against damage suits from the public. The federal government will add up to \$486 million more, but this still leaves more than \$6 billion in property damages to be picked up by victims of a Brookhaven-sized accident. And no insurance company - not even Lloyds of London - will issue property insurance to individuals against radiation damage."^{7c}

Reactor safeguards and stricter regulations are due to fall short of reducing the danger from atomic power plants. The utility operators and the government oppose such measures, in their attempt to make nuclear generation of electricity competitive, because of their prohibitively high costs. Technical difficulties with respect to the adequate containment of radioactivity also add to the problems. And, as with other forms of pollution, perfect policing of the atomic power industry is unachievable. Glen F. Hallman, Control Officer of the Northwest Air Pollution Authority, can attest to this fact.

There is no doubt that new power sources are needed. Our conventional fuel reserves are dwindling, but so are our sources of low-cost uranium. There is a good chance that new sources of conventional fuel will be found to carry us well into the next century, but means for developing new reactor fuels have become technological disappointments. Low-cost uranium fuel reserves may run out before the turn of the century, and problems with the sodium-potassium cooled fast breeders may not be solved for 10 or 20 years, too late to recover the lost fuel.

The only answer is to develop alternative technology. Atomic energy is proving to be a technological blunder. New forms of power generation can be explored. Solar energy, tidal power, heat from the earth's core, fuel cells or magneto-hydrdynamic devices or even thermonuclear fusion could provide alternatives if we spent money in these areas.

We are finally learning, particularly with respect to the automobile, that we have accepted highly inadequate technologies. We need to progress and build machines that don't destroy us or our ecology. We need to look beyond the almighty dollar and realize that we can't accept anything short of the best technology possible.

1. Independent Citizens Research Foundation for Study of Degenerative Diseases, Inc., The Independent, Danger From Atomic Power Plants, March 1969, p. 6.

2. Battelle Memorial Institute, Hanford Atomic Products Operations Calendar Year 1967, Radiological Health Data and Reports, September 1969, p. 410.

3. Phillip M. Boffey, Radioactive Pollution: Minnesota Finds AEC Standards Too Lax, Science, Vol. 163, 7 March 1969, p. 1044.

4. D.A. Wolfe and T.R. Rice; Considerations on Safe Levels of Radioactivity in Aquatic Environments, to be published in Scientia.

5. (a) W.S. Davis, "Conditions for Coexistence of Aquatic Communities with the Expanding Nuclear Power Industry," Nuclear Safety, Vol 10, No. 4, July-Aug. 1969, p. 296.

5. (b) W.S. Davis, Ibid, pp. 296-4-5.

6. Elsie Jerard, We the People and Nuclear Power, Jan. 1969, p. 3.

6. (a) Elsie Jerard, Ibid, p. 4.

7. (a) R. Curtis and E. Hogan, The Myth of the Peaceful Atom, Natural History Magazine, Volume LXXVIII, No. 3, March 1969, pp. 2-3.

7. (b) R. Curtis and E. Hogan, Ibid, p. 2.

7. (c) R. Curtis and E. Hogan, Ibid, p. 7.

grape *continued from page 17*

if your talents run to diddling around with an electric grape there is a place for you in our world of science.

Ninety percent of all I have seen in "scholarly" (scientific) journals are really Electric Grapes...despite the fact that purple prose is definitely absent. Besides reading Electric Grapes, I saw them, I was lectured to by them, and I spoke to some of them on occasion. Now that I think of it, most professors seemed to turn purple and hum dangerously in my vicinity a lot of the time. They did not, and probably do not, enjoy being confronted with the questions of an overly enthusiastic as well as overwhelmingly socially unskilled student. I now realize that my error lay in the fact that when it came to Biology I acted more like a holy roller than a potential candidate seeking to become a certified and legitimate participant in respectable High Church circles. I now realize that I should have more earnestly learned my catechism--the phyla, the Krebs Cycle, the diagramming of Rhodophyte and Clinorchis life cycles and so on. I didn't worship the same idols as the others; I never kissed a Bishop's ring, all the while murmuring the proper niceties about the current Cardinal Bellarmine.

But there was one thing I did know...that after I was able to expound the catechism of my discipline, showing that my reflexes were conditioned well enough to earn me proper certification, that I could then pick up a fairly secure, mediocre paying job, somewhere, sometime. And I also knew that someone would

be interested in me only if I were of use to the building of his version of an Electric Grape.

It was then that I switched to Sociology.

Now we all know that Sociology has its fair share of fools and knaves. However there seems to be much hope for them. I liked them primarily because they did not have too much of a tendency to treat words solely as objects. Then too the sharper of them at least had the grace to be uncomfortable using the discipline's pretentious jargon, and pseudo-scientific methodology. These actions and attitudes were not overtly evident in the exact and biological sciences since they dealt with a form of language whereby words were objects. For instance if the biologist brought the subject of the Zygomatic Arch up in casual conversation, there was little chance for idle speculation as to what was exactly on his mind. One could not approach a discussion of the Normative view of society in quite this manner, since one began to experience linguistic and semantic difficulties very quickly.

However the conflict of language and attitude was even more subtle, and even more flagrantly obvious. One concrete example I can use concerns a biology professor I once had. He insisted that on his exams there was one and only one answer to the question "What is Life?" It was expected that one wrote quickly, neatly, and accurately that life was "That which contains DNA and replicates."

Such a question, answered with

such finality, betrays a rather dry, rigid Einstellungen or mental set. I came to feel that this answer actually exhausted that category called life for this particular professor. To him all life was simply an assortment of quivering gobs of DNA; and all tampering with it, so long as it was done in the name of Science, could only be good.

He, and most of his kind, were not so generous to Rachel Carson and her "Silent Spring." To these people such a thing as DDT and other pesticide abuse wouldn't exist, since it was a proven product of-- and used in the name of--enlightened science. And science in those days was a word which brought up a different image than it now does. This was the science which we knew less of, since no great scientist since Huxley had attempted to communicate with the layman, until Rachel Carson came along. She shook a lot of trees, and dumped a lot of people out onto the ground to interact with the environment--and lo, it was found to be as she wrote of it.

To me life is more than replicating DNA. It is a complex interaction, and like the fluid language of sociological definition it changes to accommodate new and unique circumstances. It is purposeful and dynamic, yet doesn't exist to function in the same manner as that detached, lonely thing we call a Zygomatic Arch. It certainly doesn't have the perfection and finality of a biological or chemical examination. And, I'm also afraid, it really can end like the birds in "Silent Spring".

As a humanist, in the classic sense of the term, I am convinced that man is not irredeemably imprisoned in his

genetic DNA, a la Desmond Morris and Robert Ardrey. I feel that man is a cultural as well as a biological being, and, furthermore, that his self-imposed though sometimes unintentional cultural pressures often turn him into either a beautiful or bestial thing, rather than his innate "biological programming". In other words I have more hope for us than does Ardrey who feels that annihilation, like salvation, is in its own way pre-ordained. To him I would point out that it is our evolving culture, not our deterministic genes which are destroying us through destruction of our environment.

So, as I see it, our problems center on our culture and environment. How can we change one and preserve the other? By emulating the Weathermen? No! But we might begin by contemplating the greenhouse.

We have previously seen that the greenhouse "effect" can kill us. Let us see why that "object" called the greenhouse can be useful to the biological organism and its eventual and ultimate environment.

A greenhouse is a place of nurture. One sets out a seed, and since there is more warmth there than in a harsh, exposed, often critically cold environment, the seed can germinate with a lower probability of lethality. When the sprouted seed is strong enough it will flower and fruit--sometimes more quickly and spectacularly than a seed left out in the open. This will illustrate the importance of phenotypic as well as genotypic growth of any seed worthy of germination.

cont. on pg. 27

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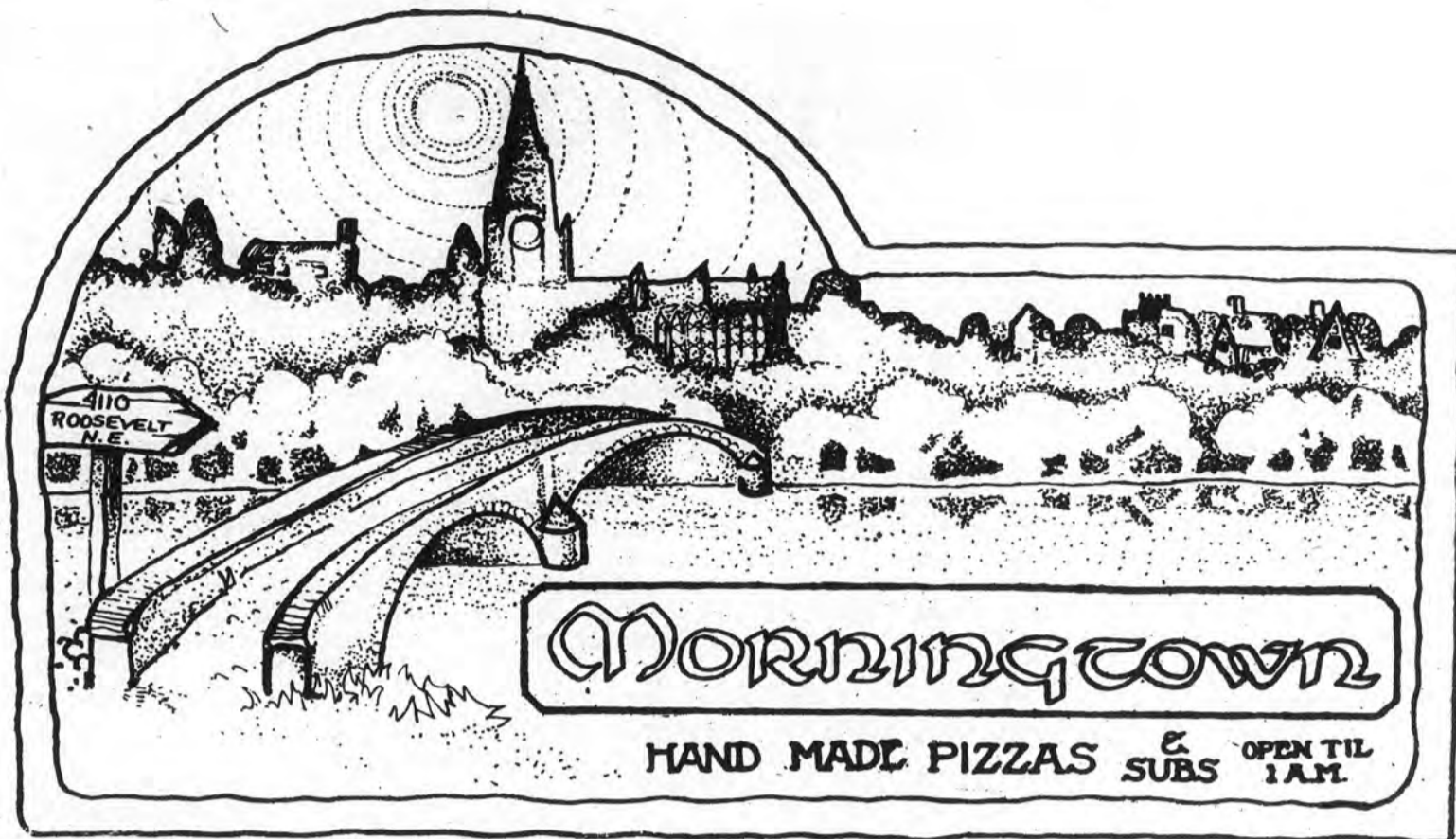



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and the word is.
And the Beginning is.*

THE COMMUNITY SCHOOL IS.

THE COMMUNITY SCHOOL
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Bellingham, Wash. 98225

COMMUNICATION
V V V

*Bellingham Theatre Guild
Christmas Show*

*Dickens' Christmas Carol
by Chuck Cavanaugh
in a one-man show
(he plays Dickens telling the story
and also all 33 characters.)*

*Fri 12/19 8:15 PM
Sat 12/20 2:15 & 8:15 PM
Sun 12/21 2:15 PM*

*\$1.50 General
\$1.00 Students*

*H St. just west of Dupont
Call 733-1811 for reservation
beginning Mon 12/15
7:30-9:30 PM*



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WELCOME TO THE LIGHT!



gimel beth



** (B) Final exams, WWSC, Dec. 15 - 19. Good luck!

** (B,S,V) Beethoven's Birthday, December 16.

(B) "The Youngbloods" in concert, with Uncle Henry, WWSC Carter Gym, Dec. 18, 8 PM, \$2.00 for students, \$2.75 for general public.

** (B) Family Planning Counseling, Tues., 7-8 PM at the Office of Public Assistance; 8-9 PM at St. Luke's Hospital.

(S) "Charge of the Light Brigade," a Tony Richardson production, Harvard Exit (807 E. Roy).

(S) "I Am Curious (Yellow)," Ridgemont Theatre (78th and Greenwood).

(S) Seattle Art Museum, Moholy-Nagy exhibition, reported to be well worth a visit.

(S) "You Never Can Tell," by G.B. Shaw, at the Showboat Theatre, U of W, Dec. 15-18, 8:30 PM.

(S) "As You Like It," by Shakespeare, at the Glenn Hughes Playhouse, U of W, Dec. 15-20; 8:30 PM.

(S) Woody Herman and the Herd, at the Westlake Room at the Washington Plaza, thru New Year's Eve.

(S) "Once in a Lifetime," a 1930 spoof on Hollywood, Seattle Repertory Theatre, Dec. 17 thru Jan. 18.

(S) "The Messiah," by Handel, performed by the Seattle Chorale. At the Seattle Center.

(S) "Don't Look Back," with Bob Dylan and "Laurel and Hardy Festival," at the Broadway Theatre on Capitol Hill.

(B) "Ulysses" and "Faces" at the Mount Baker Theatre.

(S) The New School Chorus, directed by Peter Scibert, performs a concert of seasonal works at St. Nicholas School Auditorium, 8 PM on Dec. 16.

(S) "Goodbye, Mr. Chips," with Peter O'Toole and Petula Clark. Opens Dec. 17 at the Paramount Theatre.

(S) "Alice's Restaurant" at the Blue Mouse Theatre.

(Monroe) Swap Meet, a market place at the Fairgrounds, every Sat. and Sun., admission is 75 cents.

(San Jose, Calif) Radical Theatre Workshop, conducted by the S.F. Mime troupe, Dec. 22 to Jan. 3 at San Jose State College.

(B) "Loves of Isadora," Vanessa Redgrave, Grand Theatre.

(S) National Boat Show, Seattle Coliseum, Jan. 10-18.

(S) Edgemont Theatre "Holiday Film Festival"; Dec. 16-19, "Rio Grande" and "Rio Bravo"; Dec. 20-22, "Manchurian Candidate" and "Seconds"; Dec. 23-26, "The Bank Dick" and "Never Give a Sucker an Even Break"; Dec. 27-29, "El Dorado" and "Ride the High Country"; Dec. 30-Jan 2, "The Apartment" and "One, Two, Three"; Jan. 3-5, "The African Queen" and "Moulin Rouge".

(S) Hear Cesar Chavez, at Garfield High School Gymnasium, Friday, Dec. 19; 8:00 PM.

(B) Winter Quarter begins, WWSC, Tuesday, Jan. 6.

Wednesday, April 22, 1970, a Nation-wide Teach-In on the Crisis of the Environment, announced recently by Senator Gaylord Nelson (Wisc).

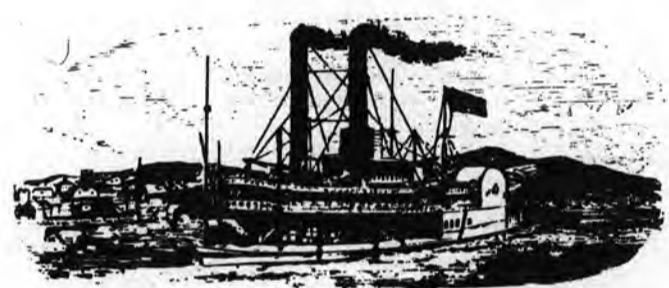
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Need Single chick to share a two bedroom home. 733-8102.

'61 Volks, \$400 cheap! 733-8102.

'60 - 654 Bonneville - Needs pistons and boring. \$150. 733-8102.

Writer urgently needs inexpensive, useable typewriter. 733-3877.

Three people need ride south to Eugene, Ore. about Dec. 20th. Will share gas. 733-3877.

Chick, 23, looking for gentle male companion who likes the outdoors, chemical experimentation and quiet indoor sports. Write Box 100, Northwest Passage.

New B'ham arrivals need housing. Anyone knowing of rooms, apartments or houses available for rent, contact Melissa at 733-3263, or Frank at 734-0077.

Male Ecologist looking for female of same species to develop philosophy of eco-hedonism. Write Box 101, Northwest Passage.

CONNECTIONS

Connections are now being run free of charge to individuals as a community service. Rates for businesses are 10 cents a word, \$1.00 minimum. Send ad and money to Northwest Passage, 1308 "E" Street, Bellingham.

1954 Rolls Royce Bentley Mark IV saloon - Best offer around \$7000. 1953 Mercedes Benz convertible, Best offer around \$4500 - Phone 733-5454, Bellingham, Washington.

I have an exquisitely carved antique mahogany bed about 8 ft. tall which is valued at \$300-\$400 and I will trade it for a "good" stereo in the \$200 range. You can see the bed at the Center Street General Store and Mercantile. Contact Chris Condon, NWP.

Chick needs ride to Calgary, Alta, Canada. Would appreciate any help to reach destination. Can afford about \$10. Phone ME 3-5677, ask for Tina or write Tina Dreade, 3525 Meridian Ave. N., Seattle, Wash. 98103.

Want to trade funky electric Silvertone guitar with wiggle bar for fairly usable microphone. See Bart, 2000 Harris.

Guitarist, 21, new to B'ham looking for gig or any coherent music scene; experienced in blues, R & B, Jazzrock, call Tim at 734-6827.

Reward! Lost male German Shepard on Old Samish Road, on Sunday, Dec. 7. "Bigfoot." Black fack and face. White belly & jaws, brown eyes. 6 mo. old, 55 lbs. Collar with tag and 26 black and white beads. Very big & friendly. Much loved and needed. Call 734-3029, Bill & Vicki Small, 1866 Old Samish Road.

XMAS SPECIAL - Have the 1st volume of NWP sent to a friend or relative for XMAS. All 12 back issues for only \$2. Card with your name enclosed. Send cash, check or MO to NWP, PO Box 119, So. Bell. Station, Bellingham, Wash. 98225.

\$100 reward for info leading to return of Martin D-18, Telmar amp-tuner, 2 1/2 ft. high Walnut speakers w/linen front, Panasonic turntable, etc. No ?'s asked. 734-1013.

Two gracious, young chicks desperately need a ride to S.F. on or about the 20th. Share expenses. Contact Liza or Cindy - 2010 30th, B'ham, or the Passage office.

If anyone has seen a 3 month old German Shepard puppy that responds to the name Roofus please contact us at 2801 Donovan Ave.

We're desperately in need of a stove and old furniture. If you can help us out we are at 2801 Donovan Ave.

Unemployed! Will consider any job offer. 734-8039 or leave message at 934 State St., Apt. No. 6.

continued from page 23

Early flowering might bring out bees, which will fly and multiply, causing other and later seeds to eventually become fertilized, and flourish to assure the continuance of the following generations.

To such a seed, which we might call "Green Power" a greenhouse could be likened to a womb. And, a person working with a greenhouse might well be likened to the midwife, once spoken of by a much abused writer of the Nineteenth century...but then it might become a potpourri of many

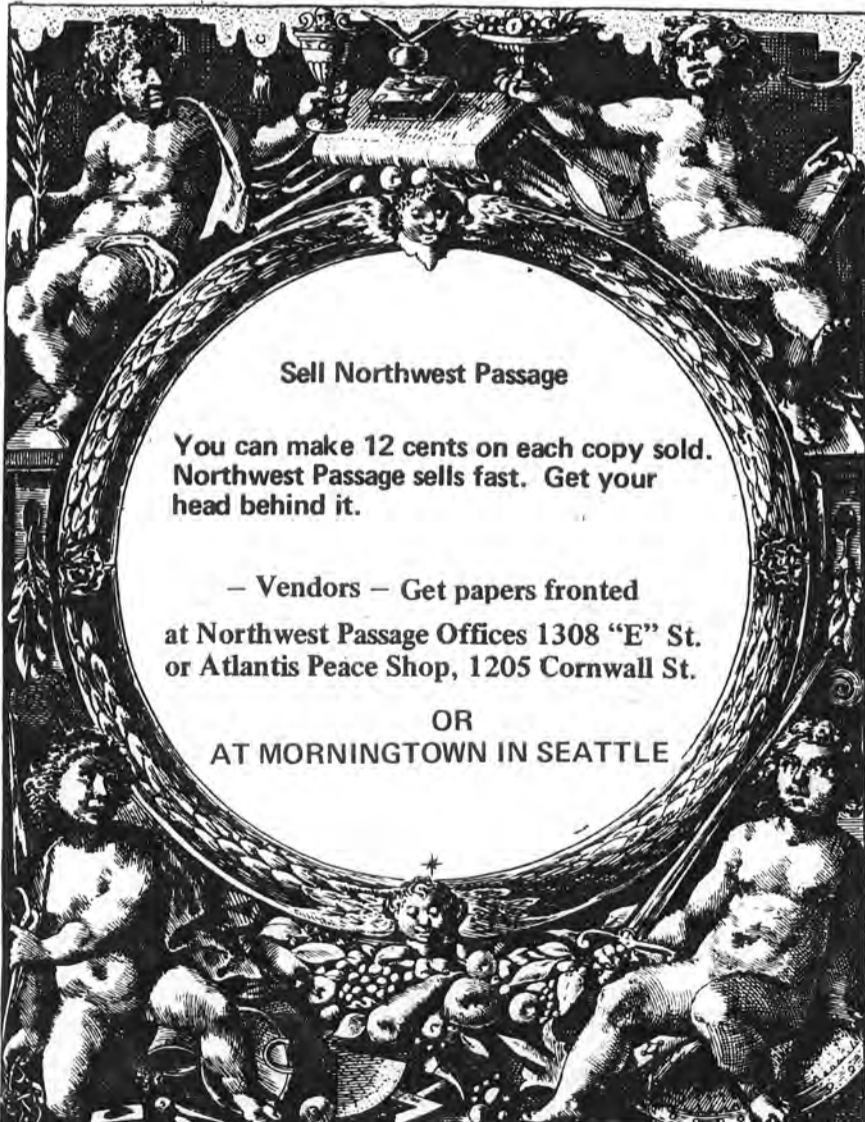
inartistically mixed metaphors. Instead, we shall go on and state some of the goals of this column.

We shall review books, discuss politics, and sometimes transcribe interviews. Policy will be set so far as feedback and self-indulgence of particular and fanatic whim will dictate. Protest meetings called by citizens trying to save their environments--plural and serial singular--shall be covered and rendered into cliché-ridden opinion. In short this column will be a greenhouse where we shall nurture and tend thoughts,

hopes, and fears that most people above ground give rhetorical and nominal attention to concerning our environment and its very real dangers. We shall be concerned with things that are purple, that hum, and go bump in the night. Sometimes we will be pessimistic, sometimes optimistic, but always we will try and keep a balanced perspective, and yet avoid being on the fence. We will try and see our environment in regional terms, calling on the Canadian conservationists for information, advise, and their latest list of No-No's. You will know as soon as

possible what the rest of the underground are up to, so far as conservation and expressing love for our environment, and ultimately ourselves, is progressing.

Well, there it is. Let's get on with it. But let us also remember that though we're not going to get out of this world alive, it's up to us to see that those following us can get INTO it and stay long enough to enjoy it as much as we do.



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OR
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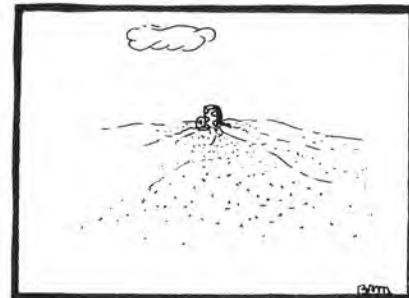
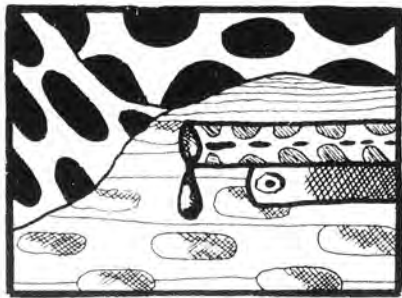
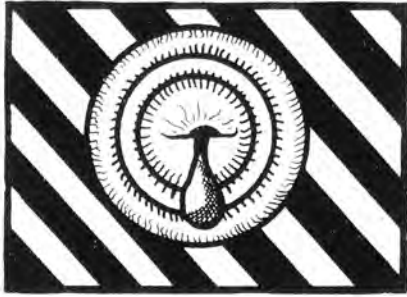


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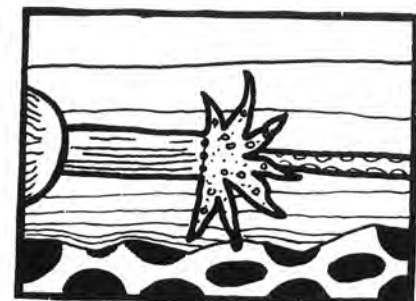
"come on people now / smile on your brother / everybody get together and love one another RIGHT NOW."



Let's all get together for some Christmas spirit at

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Dec. 18th

**UNCLE
HENRY**

8 pm



\$2.00 for students,
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Carver Gym - WWSC

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