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EARTH FIRST!

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Vol. IX, No. I

THE RADICAL ENVIRONMENTAL JOURNAL

THREE DOLLARS

Cavebugs Saved From Oblivion!

by Barbara Dugelby
and Christi Stevens

On September 16, 1988, a miracle happened. The Reagan Administration awarded five lowly, creepy-crawly, cave-dwelling BUGS in Texas the distinguished protection of the Endangered Species Act. Not just your regular ESA protection either. These critters, known nowhere else on the planet, got emergency listing! That means no waiting around for the "the public" to tell Reagan's fish and game soldiers whether this is the right move or not. These little subterranean friends were protected the minute the ink hit the pages of the Federal Register. History was made.

Only six days prior to this momentous occasion, Earth First!ers had ended a twelve-day occupation of the area where the caves are located. Yes, in a rare expression of the theorized "Neanderthal gene," Texas Earth First!ers took up cave-dwelling to protect these rare critters, keeping a constant vigil over the precious portals to the only habitat of the five proposed Endangered Species. Most, if not all, of the range of the rare endemic creatures is threatened by suburban development and high-tech industrialization (see article by Lou Jost, Mabon edition).

That the EF! cave occupation was instrumental in prompting the US Fish and Wildlife Service (FWS) decision is apparent from the following: Prior to the occupation, FWS had 1) refused to respond to requests

by biologists and environmentalists to award the critters emergency listing; 2) had refused to respond to threats from landowners to seal in the caves with cement; and 3) had not planned to act on the proposed listing until after the election.

ECOLOGY OF THE CAVES

The 5 listed species are the Tooth Cave Pseudoscorpion, the Tooth Cave Spider, the Bee Cave Harvestman, the Tooth Cave Ground Beetle, and the Kretchmarr Cave Mold Beetle. The caves inhabited by these bizarre troglodytes are found between two limestone formations, the lower belonging to the expansive Edwards Plateau, the upper being a small limestone island called the Jollyville Plateau. The sculptured limestone was deposited by countless microorganisms about 150 million years ago, when Texas was under a sea. As the sea retreated, and even today, water percolating through the pores created, and creates, the "honeycombed" layers. The cave system is truly a subterranean "Galapagos Island" in that the biota of the caves has evolved in almost complete isolation for thousands of years. Scientists refer to some of the cave invertebrates left by the sea as "living fossils." Others which came later adapted and evolved in the dark isolation of the caves, never to return to the surface.

The caves were first investigated by entomologists and geologists in 1963. The scientists immediately recognized the biological uniqueness of the ecosystem, discovering at least 6 species previously

unknown to science. Yet for reasons unknown, studies were not expanded at that time. Interest did not arise again until 1984 when another survey was initiated by the Texas System of Natural Laboratories (TSNL). That same year, one of the landowners, Doyle Wilson, applied for a permit to develop the area. In a letter to TSNL, three University of Texas scientists protested the routing of roads for the development in the watershed of the caves. Concurrently, the Travis Audubon Society formally petitioned the Fish & Wildlife Service to list 6 of the rare species as federally Endangered. For 3 years, despite overwhelming documentation of the creatures' rare status, FWS sat on the petition.

EFFORTS TO SAVE THE CAVES

EF!'s campaign to save the caves began in August of 1987, when we opposed an outer loop roadway plan which threatened the caves as well as the Black-capped Vireo (BCV - an Endangered Species) and the Golden-cheeked Warbler (GCW - a state Threatened Species). In February of 1988, Barbara Dugelby presented an Earth First! proposal to the Austin City Council for a City Threatened and Endangered Species Ordinance. Highly in favor of the idea, the City Council appointed a Citizen's Task Force, including Barbara, to draft the ordinance. The draft ordinance was completed in September of this year and, if passed, will be instrumental in the protect-

ing cave bugs and other threatened and endangered species (article next issue).

In March, we discovered a wastewater line passing near Tooth Cave, potentially disrupting its hydrology and opening the area to invasion by exotics such as fire ants. The wastewater line also cut right through the occupied habitat of a BCV, removing at least half an acre of its small territory. EF! jumped on the City for allowing this blatant destruction of an Endangered Species' habitat, threatening legal action should this continue. In the face of potential lawsuits against the City, the ordinance proposal became all the more attractive to Council Members.

Although aware that their land had biologically significant caves, the landowners, Fred Purcell, Bill Faust, Doyle Wilson and others, neither cared about ecology nor had any idea how much trouble ecology could cause them.

When EF! began exploring other caves in the area, we found that construction for subdivision housing and commercial development had literally ripped through almost the entire range of the caves. New roads dissected and covered caves. Vista Chemical, owner of one tract, had filled in three of their sinkholes. Construction workers dumped their trash into the caves. Diesel tanks dripped toxic fuel in the watershed. A 20-foot-deep trench was cut out of the limestone next to Amber Cave. All

continued on page 4

Mt. Graham & Laws Lose In Congress

Women's Action Group Won't Take Mo Shit

Mo Udall is *not* an environmentalist?? We had always heard he was! Look what he's done for Alaska wilderness. Look at Arizona? Yes, let's look at Arizona...

The Mount Graham issue, telescopes versus pristine mountain top, is being decided in Congress now, October 20! Just days ago, a bad rider was attached to a basically good bill (concerning many land protection issues) and was passed in the US Senate. This rider has negated all public input on this issue, bending to the breaking point the laws concerning NEPA and the ESA (see last three issues for background and see accompanying article). The Congressional action, in effect, says to the public that the Red Squirrel - an Endangered Species - along with rare plants, the highest Black Bear population in AZ, and a relict ice-age forest are not important enough to justify consideration of alternatives for the telescope complex! (The scopes, if they are to be built, could be placed on peaks already developed for astronomy.)

Arizona Earth First! was not willing to let this legislation, and Udall's complicity therein, pass unnoticed. Three women, Nancy Zierenberg, Nancy Morton, and Lynn Bohi, decided it was necessary to go to Arizona's environmental representative to give him one last chance to retain his reputation! We occupied Mo Udall's Tucson office the Monday following the Senate's hasty decision. We demanded that he take the rotten bill off the Unanimous Consent Calendar for the House (which eliminates any discussion or debate on the bill), and that he publicly announce his support of keeping Mt. Graham in a pristine state - NO SCOPES!

When we announced that they were prepared to stay a *long* while, we were informed that the doors would close at 5 PM and the police would arrive soon after. How silly! We knew that! The excitement for the day was generated by the great support team outside. Banners hung from the balcony facing the office; signs decorated the courtyard. Fortunately for the

support team, Cushing Street Bar was next door, so Guinness on tap kept everyone refreshed.

Come 5 o'clock, we saw new faces. The police had indeed arrived. A plethora of media had been waiting for this moment. The women were politely dragged out (as they indicated they would not walk out voluntarily) toward the cameras, while Udall's aide tried desperately to divert the policemen and their burdens out the side door!

What next? Whatever the Congressional outcome, Earth First!ers around the country (and the world) can give us a hand by letting the Max Planck Institute, Smithsonian Institution, Ohio State University, and University of Chicago (all financial partners in this crime) know that the bad girls and boys of the environmental movement are committed to preventing scopes on Mt. Graham (see Chapters 7 & 8 of *Ecodefense*). The Steward Observatory can't fund the scopes by itself so the loss of financial partners will be as severe as any other blow.

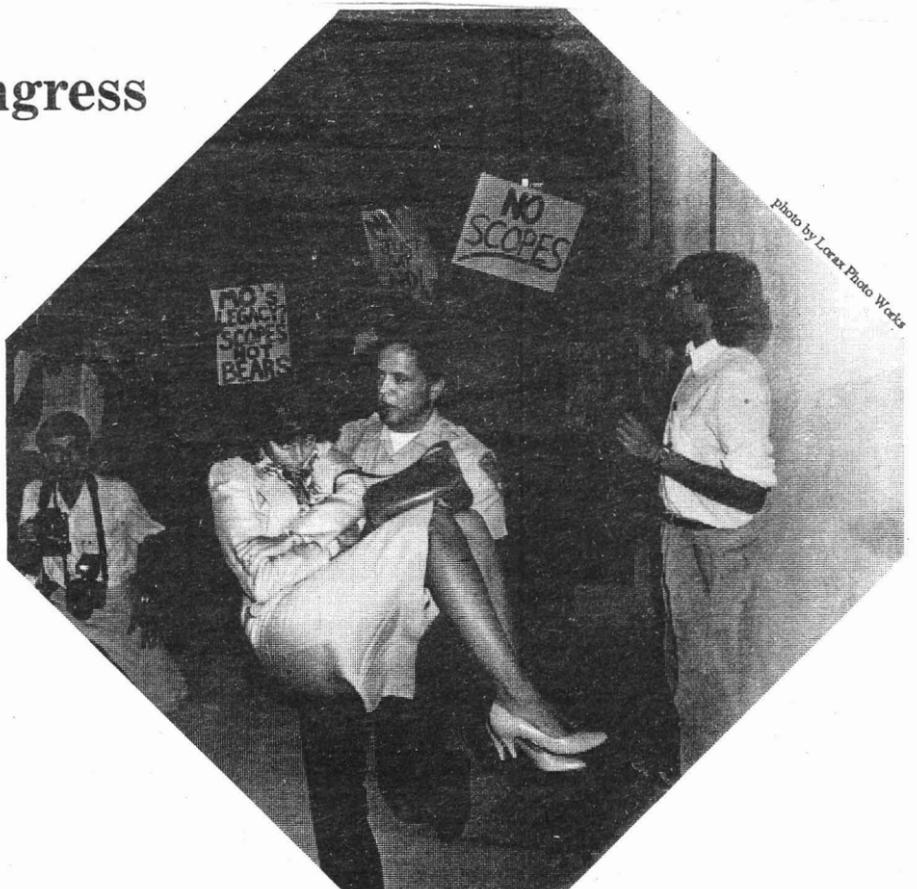
If our other strategies fail, come join us on the mountain this spring in front of the bulldozers!

-Women's Action Group

Mt. Graham Legislation - Good and Bad

And Ugly: The legislation authorizing telescopes on Mount Graham is yet another case of Congress circumventing the laws it created to protect the environment. As originally written, it completely bypassed both the National Environmental Protection Act (NEPA, which sets up the Environmental Impact Statement process) and Endangered Species Act (ESA). It denied any chance for public review and removed all options for legal challenge. It was so bad, we felt optimistic that the Senate would simply kill it.

Faced with intense lobbying by a coalition that included every major environmental group (along with strange bedfellows like the NRA), and with reluctance



Mount Graham demonstration at Congressman Mo Udall's office.

by a few senators to twist the ESA just a few weeks after they reauthorized it, Arizona's senators rewrote the bill several times. In the process, we won and thus we lost. On the plus side, their final version requires full compliance with the ESA and only partially limits public review under NEPA. In return, though, the few environmentally aware senators we'd counted on agreed to let the bill slide through the Senate, and the bill ties Mt. Graham development to a badly flawed Biological Opinion that may doom the Mt. Graham Red Squirrel to extinction.

At press time, the bill had not been considered by the House, but all involved expect it to pass. After almost five years of following the established process, we were defeated by the system again.

Two real victories also came with this legislation, successes that would normally merit great celebration. Mt. Graham was

dealt with on a rider, as part of a package that included other important land measures. The biggest part is a huge swap of state and federal land in Arizona that insures lasting protection for several sensitive areas. The BLM tried to load that with a proposal to delete 40,000 acres from the Kofa National Wildlife Refuge to ease passage of a new powerline. During negotiations over Mt. Graham, that provision dropped out and a mineral withdrawal (i.e., protection from mining) for Kofa was added.

Also included in the package was a bill, long since passed by the House, establishing the San Pedro Riparian National Conservation Area, the first such in the country. The bill for this 56,000-acre BLM area, along southeast Arizona's San Pedro River, includes good water rights language and an explicit ban on grazing.

- Dale Turner

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A VIEW OF THE VORTEX

Wilderness teaches humility. Those who enter wilderness with hubris are apt to depart, if they depart, humbled. Furthermore, wilderness in the East is wilderness, claims of parochial western conservationists notwithstanding. So Dave Foreman, Reed Noss, Jim O'Conner and I were reminded on our recent hike in West Virginia's Cranberry Wilderness. Glorious as the Cranberry is, we left it filled not only with glee; we left it also with a broken arm and a brown recluse spider bite (the former mine, the latter Dave's; Easterners Jim and Reed emerged unscathed, with Reed later chiding Dave as a wimp because he went to the hospital for four days when he should have been proud to die at the jaws of a spider). No more will we underestimate the power of enigmatic microfauna - such as the brown recluse - and enigmatic microflora - such as the moss upon that fateful slippery rock. No more will we boast of the superiority of wilderness in the West. The East, though severely wounded, is alive and will recover.

Such was a theme of the Eastern Wilderness Conference, organized and described in this issue by Bob Mueller. The conference was, as Dave said in his concluding speech, a landmark event and one likely to rejuvenate the Earth First! campaign in the East for big Wilderness. The rising influence of EF! in the East is also indicated by recent successful gatherings or actions of EF!ers near Pond Ridge in Virginia's George Washington National Forest, in Illinois' Shawnee National Forest, in Maine, in Florida, and on Mt. Greylock in Massachusetts. Indeed, some states in the East are now graced by more overt EF! activity than some states in the West. A comparison of New Hampshire and Nevada with regards to Earth First! presence is telling: NH is one of our strongest Eastern states, and one of the states facing the most critical wilderness battles (NH timberlands are going on sale); while Nevada is our weakest Western state, yet again one of the states where wilderness battles are now most critical (grossly inadequate Nevada Wilderness legislation may pass next year). Rough and hasty estimates suggest that New Hampshire has about 1 EF!er per 200 square miles, while Nevada has about one EF!er per 10,000 square miles! This latter amount of territory represents over 50,000 miles of livestock fencing - far too much work for most individual activists. Meanwhile, similar to the EF! situation in parts of the East, Earth First!ers in the Midwest are coalescing, as Roger Featherstone explains in this issue.

Another gathering meriting special mention here is the California Rendezvous. California EF!ers were pleasantly surprised to be joined by Wobblies at this year's state-wide EF! gathering. It seems that, thanks largely to two fine issues of the *Industrial Worker* which discuss EF!, growing numbers of Wobblies are joining Earth First! and growing numbers of Earth First!ers are joining the Industrial Workers of the World. Should this friendship continue to blossom, it could undermine the jobs versus environment argument so often used against us. Loggers might then have difficulty attracting hundreds of supporters to their pro-clear-cutting rallies, as they managed to do this past spring and summer in Montana and Oregon. Having long ago allied ourselves with Sea Shepherd, opportunities suggested by befriending the IWW are exciting: e.g., port blockades of rainforest logs, Japanese fish, and American shrimp (not that any self-respecting shrimp would consider itself American, nor any fish consider itself Japanese). In her articles on the California Rendezvous and the dramatic actions which followed, Judi Bari tells of the not so wobbly Wobbly-EF! friendship, as does Dale Turner in the news column.

Judi also tells of an exciting trend which

manifested itself at the California Rendezvous and subsequent actions: the increasing guidance being given to the EF! movement by women. No previous issue of the Journal has reported on so many planned and completed EF! women's actions.

Returning to the subject of wobblies, this issue also features an article by Lynn Jacobs on cows. This serves as a piece to motivate EF! groups to hold protests this January expressing outrage against welfare ranchers, without whom the West would have grass. Colorado EF!ers will spearhead the protests with their action at the Livestock Growers Convention in Denver, as discussed in this issue.

The feature ecology pieces in this issue are the conference reports by Reed Noss. From his accounts, it seems that if a common theme characterized these important ecology-related conferences, it is that scientists are beginning to awaken to the plight of the planet, but that it is probably too late to avert unprecedented catastrophes.

To shift to a lighter topic, Christoph Manes presents herein a sterling exposition of the concept of hypertrophic drive and its relevance - nay, necessity - for adequately assessing human intelligence. Even as Marx stood Hegel on his head, reversing Hegelian idealism to yield Marxist dialectical materialism, Manes stands the humanists on their heads: He shows that, far from being a faculty to exalt as the pinnacle of evolution, the human intellect may better be recognized as an evolutionary aberration.

Christoph's fascinating discussion of ritual brings to mind a related subject we hope one of our essayists will explore: monkeywrenching as ritual. Rites of passage were essential for the health of primal cultures. Modern society generally lacks such rituals, or has substituted bastardized forms thereof, forms which perpetuate the prevailing paradigm, as Christoph shows. This demise of ritual, some anthropologists have suggested, is a major cause of the malaise of the modern world. So why not reinstitute initiation rites and other rituals in the form of ecodefense actions? Adolescents could earn their adulthood by successful completion of ritual hunts, as in days of yore, but for a new kind of quarry - bulldozers and their ilk. Anyway, this might be a fun

topic for one of our speculative writers to pursue.

We have devoted an inordinate proportion of this issue to books. This is partly because we hope to promote ecological books for our readers who buy Yule gifts. It's also because we sell some of these books . . . and we want your money. The *EF! Journal* remains financially solvent only because of the books (especially *Ecodefense*) and merchandise we sell. We give away too many poverty subscriptions for the Journal to entirely support itself.

While on the subject of books, we should apologize for a couple mishaps in our last issue pertaining to books. The excerpt of Andrew Bard Schmookler's book and the review of Dolores LaChapelle's book are in this issue, not last, contrary to what was said in our last book section. (Yes, Dolores' book is finally available, and well worth the wait!) Another oversight which occurred in producing our last issue was the omission of the byline for the extensively researched article on the battle for the Black-capped Vireo. That article should have been credited to long-time Texas EF! leader Barbara Dugelby, now pursuing graduate studies under the eminent conservation biologist Michael Soule at the University of Michigan. One final apology is due, perhaps. We received numerous calls of complaint from readers who had not received their Journal by mid October. As we had previously explained would be the case, we mailed the Mabon issue a week late; the rest of the delay is a result of the torpor of 3rd class mail delivery.

To end, I wish to mention just that - ends, results. Reporters often question EF! leaders about the effects of our actions, about whether or no we ever actually save that for which we fight. Henceforth, when reporters haggle activists in this way, the EF!ers would do well to give the reporters copies of this issue. Herein, Jasper updates us on the EF! Biodiversity Project's progress in slowing snake slaughter; and herein Barb and Christi describe Texas EF!'s recent stunning success at winning Endangered status for five species of troglodytic microfauna. Thanks to Texas Earth First!, we have another battle cry: Long live the Kretchmarr Cave Mold Beetle!

-John Davis

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Submissions are welcomed and should be typed or carefully printed, *double spaced*, and sent with an SASE if return is requested. Electronic submissions are even better, either on Macintosh disks or via Econet (login "earthfirst"). Art or photographs (black & white prints preferred, color prints or slides OK) are desirable to illustrate articles and essays. They will be returned if requested. Due to our tight budget, no payment is offered except for extra copies of the issue.

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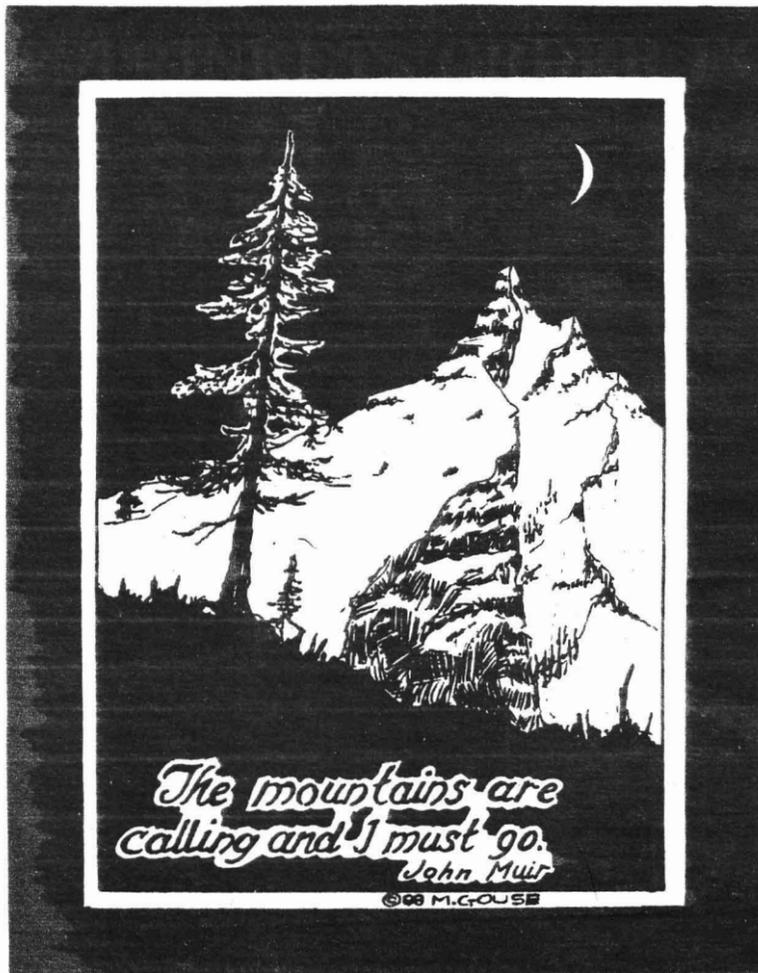
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Mailing: Tucson Earth First! Group

Please send any newspaper clippings mentioning Earth First! or dealing with subjects of interests to us at POB 5871, Tucson, AZ 85703. Clippings about monkeywrenching of any kind would also be appreciated. Thank you!



Cavebugs Saved . . .

Continued from page 1

these atrocities were reported to the City's Department of Environmental Protection and were eventually dealt with. But much of the damage was irreparable; this globally unique ecosystem was possibly permanently spoiled.

Finally, in April 1988, five of the six petitioned species were proposed for Endangered listing. Comments on the proposal from biologists, public officials, and environmentalists all requested that the critters be given emergency listing and Critical Habitat designation. In spite of - or perhaps because of - the proposal and the growing awareness of the sensitive cave system, construction accelerated in the area.

During all of this, the "responsible authorities" said conservation measures were proceeding. The FWS saw no reason for emergency listing, or even prompt listing. The City permitted almost everything the developers wanted, believing they had no legal authority to stop construction on private land. The developers meanwhile massaged the City, the conservationists, and the scientists with promises of preserves, easements, and greenbelts.

At one point, Faust offered to fund a survey of the caves - if the City would agree to let that be the last word. The City could not agree to that, because it could take at least five years to understand the labyrinthine ecosystem and how to protect it. So Faust took his ball and went home.

When Faust got home, he called FWS to ask them just what would happen if he were to cement in those pesky caves. FWS hemmed and hawed, and ultimately told him that, by golly, they would send one of their enforcement officers over right quick. In truth, they could do nothing. Until the critters were listed, the landowners had the legal right to destroy the only habitat of these helpless creatures.

Hearing of this threat, we poised for action. We urged FWS to get on with the listing. More than the legally mandated period had passed since the proposal. We were informed, however, that the listing was "on hold". FWS had an unwritten policy that when there is a conflict with a landowner, they try to resolve it before they list a critter. Especially in Texas, there is strong antipathy to the federal government meddling in local and private affairs.

Then came the straw that broke EF!'s back. . . On Friday, August 26, we learned that another landowner, Fred Purcell, had announced to the City that he would be in constant contact with FWS regarding the listing, and as soon as he heard that the bugs were to be listed, he would fill in Tooth Cave in order to evade any fines or restrictions imposed by the Endangered Species Act.

City officials assured us that they would contact FWS on Monday and urge emergency listing and a restraining order to prevent the landowners from harming the caves. The procedure could take 24 to 72 hours. EF! feared that if Purcell learned of the move, he would immediately cement in the cave. We planned our action. We would protect the caves and critters until the law could.

THE OCCUPATION

At 3 AM on August 29, we stole onto the property. Christi Stevens was to occupy Tooth Cave, Mark Sanders would be in Amber Cave, and Forrest Jackson would occupy Kretschmarr Cave. Provisioned for four days, we would carefully minimize our impact on the caves. All our human waste was contained sanitarily and our movements were kept to a minimum. Each caver had a support person who was in radio contact with other support persons and a driver parked on the main road.

Back in town, Barbara Dugelby and our attorney, Bill Bunch, contacted the press, the City, the landowners, and the FWS to notify them of our vigil and the terms under which we would leave the property. We asked the FWS for the immediate listing of the bugs, the designation of scientifically determined Critical Habitat, a restraining order on the landowners, and a conservation plan developed by concerned biologists and geohydrologists. We demanded that the landowners state publicly and in writing that they would not harm the caves, that they would allow and help finance a survey of the cave system and its recharge area, and that they would

participate in a regional Habitat Conservation Plan (already underway by FWS; would also include the BCV & GCW).

Local TV and radio stations and newspapers interviewed Barbara and the cave sitters. Our message reached the public within hours of our occupation, urging them to ask their Congresspersons, the FWS and the developers for immediate protection of the caves.

On the afternoon of the first day, Purcell, owner of Tooth Cave, paid Christi a visit, asking her to leave the property. When she explained that she wouldn't leave until he requested the FWS to list the bugs and signed an agreement not to harm the caves, he called the sheriff. That evening three deputies arrived. Christi re-

force to drag her out. Christi did not want them to drag her out, causing a commotion, and she certainly didn't want them to teargas the cave, so she reluctantly came out. She also felt that the mere presence of three clumsy deputies (one wearing a very acrid cologne) and herself was doing the cave more harm than good. She was still concerned that Purcell would harm the cave, but hoped that after the publicity we had generated, he would realize that such a move would be suicidal to his character. Besides, we still had Mark and Forrest in the other caves to keep the pressure on.

On Thursday, the fourth day of our occupation, the FWS decided to give the appearance of doing something. They held

Long live the Kretschmarr Cave Mold Beetle!

treated to a small crawlway at the back of the cave, and two deputies followed her. They talked through a small opening between her crawlway and the main cave. They put her under arrest and for an hour used the most maudlin "cop psychology 101" tactics to try to talk her out. Finally they gave up and left.

We learned the next day that the FWS had refused to undertake emergency listing and that the listing might not occur until after the Presidential election. However, our campaign was being covered well by the press, thereby increasing the pressure on FWS.

That afternoon the deputies appeared again at Tooth Cave (Purcell was the only one filing complaints with the authorities) and again Christi retreated to the crawlway. Two went back to talk to her and a third removed her food and gear. She had only a gallon of water with her. One of the deputies squeezed into her crawlway and backed her into a corner. He explained that they were ready to use teargas or

a meeting at Texas Parks and Wildlife Department with key biologists and geologists to "identify the threats to the caves" (as if they were not already known!). EF! was there in full force as were TV, radio, and newspaper crews. Barbara rightly accused the FWS of "moving slower than a Kretschmarr Cave Mold Beetle." The news stations all reported that indeed the FWS had admitted that no action had been planned at the meeting.

By this time, the story was spreading around the country. A friend called from Hawaii to say that he had heard about some crazy environmentalists living in caves to protect some endangered bugs. He knew just whom the radio announcer was speaking of. Cable News Network came to cover the action. The CNN coverage was sophisticated and to the point - out in the Texas Hill Country, a battle raged between wealthy developers, scientists, public officials, and hard-core environmentalists over the last rights of sev-

eral cave-dwelling organisms.

Still the Fish & Wildlife Service failed to act. We traded shifts at the caves while continuing to badger FWS. Around-the-clock vigils, with at least four of us in the field for 12 days straight, were a greater strain than we had anticipated. On September 13, we delivered press releases announcing the end of the vigil. We would continue to monitor the area daily, but we felt our mission of creating enough awareness to ensure protection of the area was accomplished.

Then the news came. Just four days later, the Federal Register announced the emergency listing of the five proposed cave invertebrates. The landowners were pissed. There was not even a grace period within which they could destroy the evidence or bring about irreparable harm to the caves. EF! was admittedly shocked. Were we dreaming or had the Reagan Administration really imposed such radical restrictions upon private landowners in Texas? Nonetheless, we celebrated, Barbara in her new home in Ann Arbor, Michigan, and us here on the Edwards Plateau. Still we knew that this was only a first step on the road to real and permanent protection of the caves.

Now the questions are: How much protection will the listing afford? How and when will it be enforced? FWS has formed an advisory team to see what should be done. We are not pleased with the selection of the team members. Most of them either subject to political pressure or academic or professional ambitions; no local conservation groups are represented; there is a gag order on all plans and discussions; and one of the most qualified members (also the most likely one to talk to us) was kicked off the team! EF! has registered these complaints with FWS. We will watch the actions of this committee and the developers closely in coming months. We will not hesitate to escalate the battle once again if we see biased or arbitrary decisions made concerning the protection of the caves. These endangered species cannot afford to be at the whim of dirty politics and EF! will not allow such to happen.

Barbara Dugelby and Christi Stevens have led Texas EF!'s successful campaigns for the last few years. They are founders of the band, Barbara and the Cave Sitters.

Letters . . .

Continued from page 3

don't see it yet. The Wobs are a very small union. Unionized workers are a small and well-paid percentage of the labor force: only 9,000 of the 130,000 timber workers went on strike this summer. And we've yet to see labor, unionized or not, get involved in a serious way in environmental causes, even when the issues are its own health and safety. Perhaps in the long run, workers (that is, the public) will wake up and realize that their own welfare depends on the earth's health. But it will be a long time, and the forests have only got ten years at the current rate of destruction.

It's too bad, but that's the way it is. Most EF!ers are more than willing to have allies from the labor movement, and have been discussing how great that would be. But not much more than discussion so far. We'll see.

Oh - a final note - Weyerhaeuser (which practically owns Washington State, even having a \$50 million heir as Governor here) has around \$10 million worth of its equipment destroyed every year. It ain't EF!ers that are doing it - it's disgruntled workers, who have never gotten back the wage cuts they suffered during the recession. That's why they go on strike. So, maybe, in a roundabout way, labor is getting some revenge. . . But the industry has two years' worth of timber and lumber stockpiled in yards and warehouses, and another two years' worth of uncut timber under contract. So that's four years of "future" destruction already done, or under contract. It's gonna take more than strikes and revenge to save the forests.

-George Draffan, Washington

Friends,

I've just been released after serving 30 days for civil contempt of court, convicted of violating an injunction barring obstruction of road construction and clearcutting 15 miles up Clayoquot Sound north of Tofino, BC.

The current falling and blasting and grading occurs between the Atleo River, once a prime salmon spawning river, and still-pristine Sulphur Passage, near the Beddingfield logging camp of Millstream Timber, contractors for British Columbia Forest Products, now Fletcher Challenge Canada. BCFP is now almost wholly owned by Fletcher Challenge of New Zealand, where, of course, such logging practices would never be allowed. Their annual report reads like a takeover strategy for worldwide conquest, subduing Mother Earth in third-world countries like Canada.

And, incidentally, subduing any other mothers who get in their way. Ananda Lee Tan is serving 45 days. Ron Aspinall, a Tofino doctor and Green Party candidate is serving 30. Allegations of contempt have been laid against 36 local residents, many of them members of the Tofino-Long Beach Chamber of Commerce who see the tourist potential being clearcut with the trees.

The boat blockades began June 12, making it dangerous to blast, as flyrock and trees landed directly in the bay; followed by an encampment of people close to the blasting. I pitched my tent on the logging road with my daughter for four days, which earned my 30 days. Dozens of tree protectors stayed in the rainforest for days, but they blasted anyway.

For weeks, protectors took turns in a basket chair hung 30 feet over the blast face. Tree houses were built, and destroyed at night by loggers, and Paul Winstanley lived in a hammock strung between two trees 80 feet over the forest floor. On his third day, the owner of Millstream Timber shot Paul with a pellet gun, and loggers started to chop the trees he was in. All this has been recorded secretly on video, now held by the RCMP while charges are laid. The loggers came back at night and finished off one of the trees, while Paul scrambled more than 60 feet. The price of his complaint was 15 days in Oakalla Prison for contempt of court.

My month in gaol cost the province

\$10,000 and the logging companies have spent hundreds of thousands trying to keep us away. Only if we interfere with their obscene profits will they listen. The Social Credit big business government has, of course, been unresponsive. Even the New Democratic Party, which has an environment platform and supported the preservation of Meares Island, sees this as an employment issue. Yet in fact there is not a single worker at Beddingfield from this area. The companies' theft of our future is not the fault of the workers, who merely suffer from tunnel vision and cannot see the destruction around them. They will wake up, though perhaps too late.

While in prison, I wrote to nearly 200 members of the provincial Legislative Assembly and the Federal Parliament. Of the few replies I have received, all but one talk about the importance of the rule of law. What about the rule of *right*?

Recently, graffiti has appeared on the sides of the Alberni Highway: "Save Tofino: Kill a Protestor," "Stop Tree Rot - Bugger a Hugger," etc. We think these are part of a hate campaign.

Company officials maintain that this road is not intended for logging the Megin River Watershed, which backs up against Strathcona Provincial Park. (There, incidentally, 60 still face charges for blockading mining exploration.) Sources inside BCFP now say the road will be used by both BCFP and MacMillan Bloedel, who hold timber leases in the Megin.

Meanwhile, this area is all part of a larger Nuu Chah Nulth native land claim. On August 28, Friends of Clayoquot Sound held a picnic for 250 people on the road, supported by hereditary chief Earl Maquinna George and the Ahousat natives. While the Federal government is willing to settle land claims, the provincial government will not even acknowledge them, and so the Meares Island claim, on which native peoples have already spent of \$1.5 million, is expected to be before the courts for the next 12 years. Many loggers feel the natives only want the land back to

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California Rendezvous

It looked like a bad start for the 150 EF!ers gathered in the Marble Mountains of northern California. Several local breweries who had promised to donate kegs backed out when they learned we were tree-spiking terrorists. It turned out not to matter, though. EF!ers don't need beer to get high.

One unique aspect of this rendezvous (besides the absence of brew) was the presence of two union reps from the IWW, or Industrial Workers of the World (also known as the Wobblies), who had come to explore the possibility of a coalition with Earth First! The IWW is not your typical AFL-type union. The AFL-CIO

Greenhouse Criminals Indicted

At the California Rendezvous, we decided to indict some of the criminals responsible for the greenhouse effect. After all, as Utah Phillips told us, "The earth isn't dying; it's being killed. And the people who are killing it have names and addresses."

So we printed indictment forms (with blanks to fill in the company name), and made banners saying "Guilty - Greenhouse Effect Violator." Using the Wobbly tactic of roving picket lines, we planned to hit four miscreants in one day: the Simpson pulp mill in Eureka, the Maxxam complex at Scotia, an Eel River Sawmills log deck, and offshore oil drilling proponents at a state hearing on that subject.

We gathered in the morning drizzle at Arcata Plaza. By the time our caravan reached Simpson pulp mill, we were 100 strong. We stretched our banners out in the road and, as the *Arcata Union* described it, "As a truck tried to turn onto Samoa Blvd., the Earth First!ers stood firm in its way and started howling like coyotes." That first truck stopped and the driver kicked back to enjoy his break. The truck coming the other direction, though, decided to run our line. But as he rounded the corner and began to smash through our banner, EF!er Corbin Solomon threw himself on the ground in front of the moving truck. The driver stopped, cursed, then rolled forward. Corbin and the rest of us behind him didn't move. As we chanted "No jobs on a dead planet," Wobbly rep Billy Don tried to hand the driver one of our leaflets. The driver reacted by swinging at Billy Don, proving that some workers just aren't ready to be educated.

After a 30 minute standoff, with trucks backed up as far as we could see, the cops finally arrived. We gladly obliged when they asked us to leave, and drove to Maxxam. We couldn't block the trucks at Maxxam because, for some reason, they weren't running. So we paraded around the company town with our banners, singing Darryl Cherney's "Where Are We Gonna Work When The Trees Are Gone?"

Soon we were met by a counter demonstration of 10 mill workers' wives carrying signs that said "Earth First! Is The Worst." We responded by calling a women's action, letting the men stay back while only the EF! women talked to the wives. This seemed to take them off guard, and soon we were discussing how Maxxam didn't care about their families or their future. Finally they said they wanted us (men and women) to talk to their husbands, and the town minister stepped forward to offer to set up a mediation meeting between EF! and the Maxxam workers. We left with this first step taken toward building the understanding on both sides that Maxxam's employees are also victims of this rapacious corporation.

Our next stop was the huge Eel River Sawmill log deck on Highway 101. There we hung banners. Then it was on to the oil hearing, which we livened up with a rowdy rendition of Darryl's song "We're all Dead Ducks." Then one of the oil nazis testified that sonic booms don't affect marine mammals, so we all shouted in unison, "Sonic BOOM!" When the startled hearing officials chastised us, we responded, "Oh, we thought you said sonic booms didn't affect mammals."

Finally, as the sun set on the golden California clearcuts, we said our goodbyes and congratulated each other on a good day's work: Four demos in one day and not a single arrest.

-Judi Bari, Ukiah CA Earth First!

wouldn't be caught dead at an EF! rendezvous. But the Wobblies were using EF! tactics long before most of us were born. They were formed in 1905 with the slogans "No Compromise" and "Direct Action Gets The Goods." The Wobblies have been the only union in US history to openly advocate sabotage. They introduced the tactic of tree spiking in the 1917 Pacific Northwest timber strike, and their black cat sabotage symbol was found on a decommissioned bulldozer in Missoula, Montana, this year. This looks like a coalition with definite possibilities. We learned about our area's radical history (there's a reason they don't teach this stuff in school), and the Wobblies found that their hell-raising spirit is alive and well in Earth First!

Another significant facet of this rendezvous was the absence (at least in any large degree) of that male machismo with which EF! has become associated. This was partly because California has such a strong feminist contingent, and partly because some of the worst offenders didn't show up. Credit must also go to the two (male) organizers of this event, Greg King and Darryl Cherney, who went out of their way to include women workshop leaders and performers. In fact, in the women's

caucus we had to reluctantly admit that, hey, these EF! men may be assholes, but at least they're trying. We also decided to confront sexism directly when we encountered it, and got a chance to do it that very night. In a late night jam session, someone tried to sing a song with the words "fuck me, shave me dry." We stopped him mid verse and never let him finish.

The women's caucus also initiated a women's action, to be held the Friday after Thanksgiving. EF! women in California (and the whole country, we hope) will hit the stores that day for actions to dramatize the use of poisons in our homes, focusing especially on women who buy them. (See Bulletins this issue.)

Other high points included Mike Jakubal (whose Freddie files describe him as a "lunatic") calmly and professorially giving a how-to workshop on tree spiking while the Freddie's stood in the audience and took his picture. The photos would be just for their own scrapbooks, they assured us.

The local Native Americans also provided inspiration to our gathering. The Hoopa, Karuk and Yurok had been upset when they heard about the rendezvous because it of it being on their sacred land during their week of sacred ceremony. However, they decided they basically sup-

port what we're doing, and sent representatives to address us. A young man talked about the Indians' spiritual attachment to the land, and an old woman sang a prayer in her native language. We were moved and honored by these gestures of acceptance.

There were workshops throughout the weekend on a variety of subjects: Wholistic Forestry (taught by Jan Iris), How to Talk to a Logger (Crawdad Nelson), Offshore Oil (Lionel Gambil), Kalmiopsis (Bobcat and MB), Tree Climbing (Kurt Newman and Greg King) and many more. Sequoia conducted an evening ritual. In addition to the Women's Caucus, a Men's Caucus formed and talked about problems of sexism in the movement, then joined with the Women's Caucus for a group discussion.

At night we danced to the music of Clan Dyken and Rootstock. The concert the following day included EF! musicians Rex Richardson, Peter Bruckner, Alice DiMichele, Mokai, Dakota Sid, Cecilia Ostrow, and Darryl Cherney. When the weekend was over and we packed to go to the action planned for the next day, our IWW observers had to admit that not only is EF! engaged in serious political work, but we also know how to throw one hell of a party.

-Judi Bari, Ukiah CA EF!



Corbin Solomon puts his body on the line during CA pulp mill blockade.

Kalmiopsis Killers Under Relentless Attack

"It's okay to be a logger!" is the new clarion call of southern Oregon's neurotic tree hunters as they grapple with personality crises brought on by the relentless summer barrage of Earth First!ers battling to save the North Kalmiopsis Roadless Area in Siskiyou National Forest.

In July and August, three waves of tree-sitting assaults were waged to stop construction on the 4200 foot extension of the notorious Bald Mountain Road (see Mabon cover story). Mother Earth assisted with drought conditions which stopped further slave gatherings in the North Kalmiopsis due to fire restrictions.

As the dry August weather prevailed, the tree hunters tried to boost their negative self-images by staging "The Silver Fire Roundup" at the Josephine County fairgrounds, complete with a 30 mile traffic jam of 1200 parading tree hearses. The aim of the roundup was to attack Earth First! and to support salvage logging in the North K., site of last year's Silver fire, by tying yellow ribbons on their tonka toys.

EF! struck back with its own messages appearing all over Grants Pass streets, buildings and bridges, including a giant day-glo pink EF! fist and the words "Earth First!" running up the supports of a park bridge. A midnight rappel over the 100 foot Graves Creek bridge left similar messages for people floating the Rogue River.

An intriguing posted apology on letterhead from the Southern Oregon Resources Alliance (SORA, a timber industry front) began to appear around town: "The propaganda campaign we waged must have been

an intolerable insult to your intelligence. ... Really, who would believe our claims that logging the North Kalmiopsis would 'restore fisheries'... and lead to 'forests for future generations'? Even we had a hard time swallowing that one... If you look closely, we used a photo of a clearcut after an intentional slash burn by loggers. We'd sort of hoped you wouldn't notice." Embarrassed SORA officials soon felt compelled to denounce the notice as a fake.

Picketing EF!ers resplendent in customized Park Service uniforms established a Siskiyou National Park visitor center in front of the Silver Fire Recovery Project headquarters. They presented a citation to chief freddie SS man Bob Martin for murdering the Spotted Owl and for other egregious crimes against the state of Nature. The "park rangers" then hiked through town to present other citations at Forest Service headquarters, resulting in the shut-down of the building.

Meanwhile, up in Portland, Peter Galvin and Karen Coulter burned the Silver Fire EIS in front of the freddie headquarters to emphasize the lies and waste which it represents, and then closed the building with a sit-in. As they were arrested, Beth Fries and Joe Whiteman scrambled up a rear fire escape and, three stories up, draped an Earth First! banner. After four hours, they came down and joined Peter and Karen in their government accommodations.

The next day, a call to FS headquarters

from an "AM radio reporter" caused another shut-down when he mentioned receiving a Stumps Suck! press release promising a follow-up action set for that day. Two days later, a costumed Smokey the Bear appeared at a rally for somnambulant Michael Dukakis, announcing that he and EF! were calling on Dukakis to establish Siskiyou National Park if elected. When Smokey strolled over to freddie headquarters, a Portland cop closed the building at the mere appearance of his visage.

On September 19, EF! *Journal* "cover girl" Mary Beth Nearing began serving the remainder of her 15 day sentence for tree-sitting, which provoked a bulldozer defection on the Bald Mountain Road. Billy was a giant, dancing, paper-mache dozer with five rabid EF!ers handcuffed together inside. Singing Darryl Cherney and Dakota Sid songs as well as his own self-scripted song of conversion, Billy shut down the road for an hour, preventing gravel trucks from finishing the extension, as frustrated freddies decommissioned Billy by tediously snipping his chicken wire under frame.

Now that fire restrictions have been lifted, however, the sleazy wilderness weevils are at it again and new roads are being cut into the last large remnant of the oldest forest on this continent. The clock continues to tick and the trees continue to fall...

-Andy Caffrey, Earth First!, POB 1444, Cave Junction, OR 97523

Midwest Headwaters EF! Rising

photo by Bob Kaspar

The upper Midwest has been changed beyond recognition in the last 150 years. Once covered by forests and prairies, the forests have now been almost completely clearcut at least once, and the prairies have been plowed. Most of the region is now covered by farmland and concrete. Some of the forest has nearly recovered, but is now in danger again. Mining has again raised its ugly head. Other toxic dangers abound. With all these threats, it was inevitable that Midwest EF!ers would swing into action. The last year has been one of building Midwest Headwaters EF!, which now includes EF!ers in a seven state area. The following reports explain what we are doing.

—Roger Featherstone

MIDWEST HEADWATERS EF! GATHERS

The last weekend of September proved eventful for Midwest Earth First!ers. We met in southern Wisconsin in the Kettle Moraine State Forest to talk about a Midwest Earth First! council. In attendance were 40 EF!ers from six states: Minnesota, Wisconsin, Michigan, Illinois, Indiana and Missouri.

With splendid fall weather and fall colors in their prime, we camped in a primitive camping area with boy scouts on one side and a group from Marquette University on the other. The boy scouts just didn't understand; the university group was more susceptible. By the end of the weekend, they were out-howling the rest of us. The nights around the roaring fire (fueled by humanist thought), were the perfect setting for Walkin' Jim's music — including "Liver Eating Johnson."

In circle meetings, we discussed the strengths we have here in the Midwest. We did not form a Midwest EF! tribal council as considered beforehand, but we did develop a clear picture of who we are. We agreed to call ourselves Midwest Headwaters Earth First! and to continue Midwest Headwaters EF!'s existing newsletter. We also agreed that there are two pressing issues that we need to address: clearcutting on our National Forests, and mining pressure on our lands.

Our region's National Forest plans call for up to 80% of some Forests to be clearcut in the next 20 years. True, these forests have already been cut at least once, but the amount of degradation and species loss that will occur if Forest Service plans are implemented is unconscionable.

Missouri faces lead mining on a grand scale. That lead mining is even being contemplated, after the complete devastation caused by lead mining in southern Wisconsin in the 1800s, is preposterous. Some areas of southern Wisconsin are still completely barren from lead mining that ended 100 years ago. All of the North Woods is threatened with strategic minerals exploration. As many as 20 national and international mining concerns are developing mining plans for the North Woods of northern Minnesota, northern Wisconsin and the Upper Peninsula of Michigan. Minerals that have been discovered include: copper, zinc, nickel, gold, silver, diamonds, platinum, palladium, vanadium, titanium, chromium, niobium, cerium, uranium, and thorium. Others that could be discovered include: lead, cobalt, molybdenum, iridium, osmium, rhodium, ruthenium, aluminum, manganese, radium, tantalum, tin, cadmium, and tungsten. These companies are also seeking oil and some are planning to mine under Lake Superior. In short, vast tracts of the North Woods are under siege. Just a week ago, the Freddie's announced that palladium, gold and silver had been discovered in Superior National Forest 20 miles from the Boundary Waters Canoe Area. Less than two days after the story ran in area newspapers, the Freddie's had accepted bids for exploration in Superior NF.

We also examined other issues of regional concern, such as vanishing species. The Timber Wolf (a subspecies of Gray Wolf) needs our help. Wisconsin's Department of Natural Resources (DNR) this week stated that they want to stabilize the Wisconsin wolf population at 80 animals by 1990 or so. Eighty is not a viable population, and thus not an adequate goal. The Minnesota DNR is considering reinstating a hunting season on the Timber Wolf. We also discussed the Woodland Caribou, and the problem of environmentalists emphasizing "charismatic megafauna" to the point of neglecting "enigmatic microflora." We also addressed the question of overpopulation

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and talked about (some of us more timidly than others) the idea of having a professionally staffed vasectomy clinic at the next RRR.

A popular idea we discussed is a regional Earth First! wilderness proposal. To facilitate this, we are planning an extensive March-April Midwest roadshow, tentatively called "The 1989 Midwest Headwaters EF! Wilderness Romp." We plan to spend two days in each town in which we play. At the show, we will call for citizens to bring ideas for a visionary wilderness proposal for their area. The day after the show, we will meet to consolidate these ideas into a local proposal. That evening we will plan actions to support the wilderness proposal. At the end of the tour, we will have a grass-roots EF! wilderness proposal for the region, and new EF! groups working to restore their "turf." We encourage input on this idea. The perennial traveler (me) will be the one to input to.

We left the Kettle Moraine howling and intent on meeting again. The region will hear the howl of the wolf a lot in the coming year!

—Roger Featherstone

FLOTILLA FLOATS FLAMBEAU

Seventy folks from Minnesota and Wisconsin joined together October 2, to protest a proposed open pit copper mine on the banks of the Flambeau River. Sponsored by Midwest Headwaters Earth First! and the Wisconsin Resources Protection Council, people from throughout the Upper Midwest sounded the alarm over a proposal by Kennecott Copper Corporation (now Kennecott Explorations, a subsidiary of British Petroleum) to dig a huge pit 60 yards from the Flambeau River.

After assembling at Ladysmith Memorial Park, we climbed into canoes and left for the mine site three miles downstream. On the way, we espied many creatures, including a Great Blue Heron.

At the mine site, representatives from the Indian community offered a smudge stick, tobacco, and wild rice to the Flambeau River. The rally site was at the end of Kennecott Drive. (The sign "Kennecott Drive" is one of the few visible features of their presence. They have torn down all the farm buildings on the 2750 acres they purchased early in the 1970s to reduce their property tax load.) Roscoe Churchill, member of the Rusk County Board, welcomed everyone. Churchill and his wife Evelyn have been in the forefront of the fights to stop both Kennecott and Exxon from mining in northern Wisconsin.

Wisconsin's Secretary of State Douglas La Follette spoke in opposition to the mine proposal, as did Al Gedicks, executive secretary of the Wisconsin Resources Protection Council. Also appearing were Milwaukee Earth First!er Karen Bishop and organizer Roger Featherstone. The rally finished with the planting of an acorn by Evelyn Churchill and young Emma Erickson, and with the singing of two inspiring songs, SLIMEBALL WILDERNESS, authored by Tina Kaspar, Casey Bishop, and Chana Kookasemkit, with the help of Walkin' Jim Stoltz at the Midwest EF! Council the week before, and THE POWER SONG.

In this first action of the second war against Kennecott's attempts to mine in Rusk county, no arrests were made, although some participants noted the presence of sheriff's deputies in the woods behind the rally site, guarding against terrorist Earth First!ers out to trample Kennecott's leaves.

—Bob Kaspar



MIDWEST ROADSHOW TO COMMENCE

Midwest Headwaters EF! announces the "1989 Midwest Headwaters EF! Wilderness Romp". EF! speakers and musicians will travel through Minnesota, Wisconsin, Michigan, Iowa, Illinois, Indiana, and Missouri in March and April. We will create an EF! Wilderness Proposal as we travel. For info, if you want us to do a show in your town, or if you can help us, contact Roger Featherstone, Box DB, Bisbee, AZ 85603.



Protest flotilla at portage on their way to rally.

Kennecott Mine Rises From Dead

Like vampires, dead mining projects have a nasty habit of rising from the dead. More than a decade ago, the feisty dairy farmers and rural residents of Rusk County, Wisconsin outmaneuvered the powerful Kennecott Copper Corporation and stopped the largest United States copper company from constructing a 55 acre open pit copper mine southwest of Ladysmith and just 100 feet from the beautiful Flambeau River. In November, 1976, the Rusk County board forced the Wisconsin Department of Natural Resources (DNR) to adjourn the hearings on Kennecott's mining application by denying the company permission to mine. Under Wisconsin law, a mining company must have local approval before the state can issue a mining permit. To nail the coffin shut, the county passed a tough mining code as part of its zoning ordinance to protect the environment against future mining projects.

Now Kennecott is back, trying to revive the dead project. This time Kennecott has the vast resources of British Petroleum, its new parent company, at its disposal. BP is the third largest oil company in the world, surpassed only by Exxon and Royal Dutch/Shell. Kennecott has used this considerable power to intimidate local government officials into giving permission for the project even before the DNR has issued an environmental impact statement on the proposed mine.

Under the provisions of a "local agreements" law written by Kennecott lawyers and passed by a sheepish legislature, any mining company can bypass county zoning regulations on mining by negotiating an agreement with local officials. Kennecott lawyers threatened

WISCONSIN RIVER HEARING HELD

The founder of Rednecks for Wild Rivers, Bob Kaspar, appeared before a Wisconsin Department of Natural Resources hearing on the future of the Wisconsin River, October 4, in Sauk City, Wisconsin. Over 300 people came to testify on the DNR proposed 77,000 acre Wisconsin State Riverway encompassing the lower 92 miles of the free-flowing Wisconsin River.

After enduring interminable bureaucratic comments on the plan, citizens gave comments ranging from advocacy of timber cutting, power line access, and ATV access, to better protection of the scenic potential. Finally, Kaspar rose to call the 77,000 acre proposal a "meager beginning, but a beginning nonetheless" for big wilderness in Wisconsin. Calling the lower Wisconsin the foundation for wilderness recovery in the Upper Midwest, Kaspar countered with a proposal for a 777,000 acre wilderness corridor, ten miles across, from Sauk City to the Mississippi River, the entire 92 mile length of the lower river, with the potential for bringing Gray Wolves, Moose, and overall biologic diversity back to southern Wisconsin.

The comment period for the Wisconsin State Riverway ended on October 12, and a bill to establish the Riverway will be introduced in the Wisconsin legislature during the next session. Earth First!ers should contact Wisconsin Governor "Toxic" Tommy Thompson, and demand big wilderness in Wisconsin.

local officials with the withholding of tax payments to the local community if they did not sign a mining agreement last summer.

In case there was any doubt about what local residents felt about the project, voters in Grant, where the proposed mine site is located, passed a mining moratorium by a large margin at their most recent annual town meeting. Kennecott has threatened to force the town into a costly battle to defend their moratorium in court if they persist in their fuzzy-headed ideas about local democracy. Several of the most vocal critics of the mine have also been threatened with the loss of their jobs if they don't shut up.

Kennecott has considerable experience in dealing with democracies that obstruct their mining profits. When the democratic socialist government of Salvador Allende in Chile voted to nationalize Kennecott's copper holdings, the corporation worked with the CIA to destabilize and eventually overthrow the government in a bloody military coup in September 1973.

While the community has little to gain from the project — 35 jobs over the 5 year life of the mine — the environmental consequences could be catastrophic. Local residents fear that the sulfuric acid (over half the deposit is sulfide ore) runoff and seepage from waste dumps, ore dumps and stockpile areas would contaminate groundwater and the Flambeau River. Although there is no mention of radioactive minerals in the company's documents submitted to the DNR, the local agreement between Kennecott and the county mentions the possibility of extracting uranium and thorium as by-products of the copper mine. The sulfuric acid produced by rainwater percolating through the mine waste piles might gradually leach radioactivity into the groundwater and the river.

Moreover, the Kennecott proposal is only the beginning. There are more than a dozen potential mine sites which stretch in a long arc from northeastern Minnesota, across the entire northern third of Wisconsin and into Michigan's Upper Peninsula. Already, over 400,000 acres of land in Wisconsin have been leased by such multinational mining companies as Kerr-McGee, Exxon, Noranda, Chevron, Urangesellschaft (West Germany), Minatome (France), and British Petroleum. Some of these mineral leases include portions of Nicolet and Chequamegon National Forests in Wisconsin and Superior National Forest in Minnesota.

Despite Kennecott's efforts to intimidate and suppress local opposition to the proposed mine, a determined core of local environmental activists has reached out to organizations like the Wisconsin Resources Protection Council and Midwest Headwaters Earth First! for assistance. The recent canoe flotilla on the Flambeau River (see accompanying story) was only the first demonstration of regional resistance to this project. If Kennecott persists in this ecological madness, a growing resistance will force BP corporate executives to weigh the potential profits from this relatively small mine against the political risks of their investment.

Al Gedicks works with Midwest Headwaters EF!

Time Running Out For B.C. Wilderness

by Rabinowitz

For the Yule 1985 issue of *Earth First!*, I wrote an article, "BC Wilderness Under the Blade," summarizing the extent of logging battles in British Columbia. This is an update on those wars over wilderness, and observations on new areas of conflict and new logging company tactics to watch for south of the border. The key message is that these battles should be of paramount concern to all North Americans as they will decide the fate of many of our largest and oldest trees and some of the biggest areas of wilderness on the continent. Letters and other actions by non-Canadians could be crucial to saving these wild lands since tourism is central to BC's economy.

LONG-TERM WILDERNESS WARS STEIN VALLEY

The fate of this pristine watershed is on hold pending another meeting between the Lillooet and Lyttan Indian tribes, indigenous to the area, and the BC Minister of Forests, an exotic. The native people have completed studies of the archaeological significance of the watershed (in which are numerous pictographs, vision quest sites, etc.) and uses other than logging. Despite the extremely marginal nature of this logging venture (Paul George of the Western Canada Wilderness Committee says that "even at the highest lumber prices, it will barely make a few pennies"), the timber companies are still surveying, convinced the deal will proceed in a few months. The provincial government, ever eager to help industry at any cost, is apparently looking for a way to break off talks off "nicely" with the native people. Although a wilderness advisory committee recommended no road building in the Stein, the BC government is negotiating from a position of questioning *how* to put the road in, not whether it should be there.

The price of wood in BC has fallen lately, but government subsidies must still make the timber lucrative to the logging corporations for they have launched a "Share the Stein" campaign costing millions of dollars to whip up the sentiments of local logging people. The gist of the "Share the Stein" message is that crazy environmentalists are using Indians to take away jobs. As usual, Indians are seen as unthinking pawns, rather than as deeply rooted individuals with a legitimate claim to the land.

One of many reasons why US citizens should join the fight to save the Stein is that a US right-wing organization is central to efforts to destroy it. The "Center for Free Enterprise" holds that all remaining forest wilderness should be logged. Rumor has it that the Center and BC loggers attended a secret meeting in Reno, Nevada, recently. Meanwhile, "Forests Forever" commercials have been launched in BC by the Council of Forest Industries, a cartel representing all major BC forest industries. These commercials promote clearcutting with idealistic portrayals of the re-greening of clearcut areas.

CHILCOTIN PLATEAU

At 1.5 million hectares (about 3.7 million acres), this vast mountainous wilderness in the British Columbia interior is being liquidated at a rate almost double the projected grow-back rate. As much of the acreage is the rock and ice of majestic peaks, this rate, should it continue, entails complete devastation of the finger lake valleys essential to wildlife. This, in turn, means the end of the livelihood of local wilderness guide outfitters, trappers, ranchers, back country settlers and the Ulkatcha Indian band, so they have been fighting back.

Dave Parker, the Minister of Forests encouraging the cut on the basis of pine beetle infestation, is a professional registered forester. In Canada, a professional forester must attain a title among an association of registered professional foresters much like an M.D. degree in medicine. (Only registered foresters have the right to sign cutting permits.) Nonetheless, this professional destroyer believes that old growth trees are "over-mature" and "decadent." The myth that old growth serves no vital ecosystem function and the myth that natural pine beetle infestations render a natural area worthless are calculated excuses for overcutting also widely used in the States. Many of the fur-bearing mammals now endangered in other areas, such as Fisher and Marten, depend on the old growth in the Chilcotin. Ungulates such as Elk and

Mountain Goat depend on the forest cover to escape the heavy snows of winter.

MEARES ISLAND

Despite the pristine quality of the island, the presence of some of the oldest, largest cedars in North America, and an indigenous population of people whose culture depends on the island, the Meares Island case is still in court and the island could be logged if the finding is not in favor of the native people. The native people are claiming to own the trees. They hold that the tree farm license transfer was illegal, a claim that will be heard (at least as a preliminary motion) by the Supreme court in late October. Fortunately there is a court injunction preventing logging now, and the whole island is still unlogged (and spiked). A trail has been built around the perimeter of the island for visitors to appreciate its natural and cultural value.

SOUTH MORESBY

One of the few great victories in BC so far, the preservation of the South Moresby World Heritage Site as a natural reserve, has sparked a desire for revenge among the logging corporations. With even Lyell Island now protected from logging (after Indians from the area blocked the road, in traditional dress, drumming around campfires; and elders sat down to block it, clutching bibles, in a downpour), the logging companies are enraged. At a slideshow held in Vancouver by the Western Canada Wilderness Committee (WCWC) on the Carmanah Valley (see below), loggers staged a counter-protest outside, yelling "sold out!" and turning people away. The loggers join together under corporate-devised slogans such as "Forests for All." The logging corporations are determined to get all remaining

TIMBER BEASTS DEVOURING CLAYOQUOT SOUND

The British Columbia timber beasts are still out to destroy the last virgin temperate rainforests of Vancouver Island. While news stories culminate with dramatic events (such as the early Meares Island confrontations) then fade out of the press and public awareness, the logging devastation continues. Now another major incursion by the timber industry has brought events to a peak, as native and white residents draw the line again at Sulphur Passage, with renewed direct action. Sulphur Passage, Shelter Inlet and Megin River form an intact but threatened rainforest wilderness.

Now liquidation of the trees in the Clayoquot area is causing irreparable loss of topsoil and damaging fisheries through degradation of salmon spawning streams along the west coast of Vancouver Island. Cutting large areas at a time in this area of high rainfall and steep slopes is causing numerous landslides. Slash burning of the wood left behind burns the organic material in the soil, undermining future growing capability and exposing the residue of nutrients to erosion. The deforestation contributes to acid rain by releasing nitrogen into surface waters and air, and to the greenhouse effect by releasing large reserves of carbon into the atmosphere and preventing the continued absorption of carbon dioxide from the atmosphere by the trees. Eroded soil buries fish spawning grounds and destroys marine deltas as the silted rivers empty into the ocean. To complete the circle of destruction, the logging companies apply herbicides to combat the brush and pioneer tree species which are encouraged by clearcutting.

Even from an economic standpoint, this logging is unsound. The logging forecloses the opportunity to expand the local tourism industry, which has been growing and providing more local jobs and revenue each year. With the establishment of Pacific Rim National Park in the 1970s, the tourist industry grew to service almost a million visitors a year, including sightseers, kayakers and hikers. Fishing in the Clayoquot Sound area has traditionally employed more permanent residents than logging and has provided a self-sufficient food supply. The new mariculture industry (rearing shellfish and salmon) would also suffer from siltation (though perhaps this would be the one acceptable loss, considering the environmental impacts of mariculture - at least the salmon and trout farm variety.)

In light of all these threats to the local economy, the main local business group, the Tofino/Long Beach Chamber of Commerce, endorsed a request put forward by Friends of Clayoquot Sound for a six

BC wilderness using such public relations tactics in the media.

NEW FIGHTS

CARMANAH VALLEY

Undaunted by stumbling blocks at Meares Island, Macmillan Bloedel wants to destroy another small sanctuary of ancient trees - Carmanah Valley, a long, narrow "hanging valley" bordering Pacific Rim National Park on Vancouver Island. With a rich, deep soil of silt, the valley has grown many trees 280-290 feet tall, with the tallest 311 feet - as high as a 30 story building, and perhaps the highest Sitka Spruce in the world! Spruce attain the greatest heights, but Western Hemlock also reach their record sizes, and along streamside hills grow ancient cedar. Most of these trees have roots less than a meter deep and grow in groves for stability along a meandering stream - to save them, the whole valley must be saved.

Macmillan Bloedel plans to road and log all but 2% of the Valley. This, despite the fact that Carmanah Valley is minuscule in the context of BC logging operations - every day a whole Carmanah Valley (27 square miles) is cut in BC. MacBlo and its cohorts have instituted a campaign involving loggers writing the government to beg for the Valley to be sacrificed. MacBlo even tried to stop the WCWC from trail-building in the Valley in order to prevent the public from seeing what they would lose, but the court ruled against them, allowing the trail-building on the grounds that it did not interfere with potential logging operations. Trail-building in threatened areas, massive public education efforts, and civil disobedience blockades are three tactics that have been largely successful at stalling or preventing destruction in BC.

month moratorium on road construction and logging in the area so that a "sustainable development" plan for the region could be designed. BC Forest Products and the BC Ministry of Forests rejected this request.

BC Forest Products is the same company that that plans to log the pristine Stein Valley watershed at the expense of an intact wilderness watershed, sacred vision quest sites, Grizzlies, etc. (See previous issues of *EF! Journal* for articles about BC wilderness battles, and see CJ Hinke's letter in this issue.) Logging operations in Clayoquot Sound are controlled by the two largest logging companies in British Columbia - MacMillan Bloedel Limited, based in Ontario and long at work against Meares Island, and Fletcher Challenge Canada Limited (formerly BC Forest Products and Crown Forest.) Their tree farm license tenures encompass more than 90% of the Clayoquot Sound land area. Together in 1987, these industrial giants extracted over half a billion dollars in profits from their BC timber operations.

In the midst of this industrial logging nightmare lives a large population of the native Nuu-chah-nulth tribe, isolated on tiny "Indian Reservations." Denied economic access to most of their area's resources, they have an unemployment rate of over 85%. Many residents of the area, including the local environmental group, the Friends of Clayoquot Sound, have long protested the bad local logging practices and called for preservation of a greater percentage of the area as wilderness. Contrary to their portrayals by the logging industry, they have not opposed all logging. Their attempts to cooperate with industry (as on the Meares Island Planning Team) have been ignored by both the government and the logging companies.

Pending road construction into Sulphur Passage sparked the renewal of a vigorous fight to protect Clayoquot Sound because it is the largest block of undisturbed wilderness left in the Sound. The road through Sulphur Passage would be only the beginning of the devastation. In less than two years, MacMillan Bloedel plans to move their logging operations from the Carmanah Valley area back into Clayoquot Sound and use the road to initiate an unprecedented rate of clearcutting.

In June of this year, a group of local residents blocked road construction. BC Forest Products obtained a court injunction to stop the blockade. Police were ordered to remove the protectors. Some blockaders have disregarded the court order, and the police are beginning to arrest them. Among those ignoring the

STRATHCONA PARK

Vancouver Island's Strathcona Park represents one of the precious few victories won so far in British Columbia. This is one of BC's largest provincial parks. The province opened the park to logging, again despite a study team recommending no logging; but again, the area was saved after resistance. This time, over 60 people were arrested.

WHAT YOU CAN DO: Write and call tourist agencies promoting travel in BC and threaten to boycott BC travel until these areas are saved. Call the toll-free BC tourism number, 1-800-663-6000, with this message. Write and call Canadian embassies and say you will boycott BC tourism and BC imports, and will tell your friends to do the same, until all remaining BC wilderness is protected. Address letters on the same theme to these provincial officials: Minister of Environment Bruce Strachan, Environment Critic John Cashore, Minister of Forests Dave Parker, Forest Critic Bob Williams, and Leader of the Opposition Party Mike Harcourt, all at Parliament Buildings, Victoria, BC V8V 1X4 CANADA. Also address letters to federal officials of the equivalent posts: Minister of Environment Tom Macmillan, Environment Critic Charles Caccia, Minister of Forests Jerry St Germain, Forest Critic (?), and Opposition Leader Ed Broadbent, all at: House of Commons, Ottawa, Ontario K1A 0H3 CANADA. While you're writing, demand an end to the BC aerial wolf hunt and other wolf kill programs as a condition of your resuming business with BC.

court order are local business people and Ahusahts Hereditary Chief Earl George.

The people working to protect Clayoquot Sound need your help. Go see what is at stake and do what you can save to help save it while you're there. If you can't go there, please send money to those on the firing line, who face legal costs. To help or gain more information, contact: Friends of Clayoquot Sound, Box 489, Tofino, BC, V0R 2Z0 CANADA; or Western Canada Wilderness Committee, 103-1520 W 6th Ave, Vancouver, BC V6J 1R2

-Rabinowitz

Rabinowitz is a frequent contributor to these pages. She also works with mainstream environmental activists on pollution issues.



GIVE SNAKES A BREAK!

Snake Defense Campaign (follow-up to "From the Garden to the Roundup, 6000 Years of Persecution," Mabon, 1988 Edition):

LACK OF ADEQUATE PROTECTION FOR SNAKES UNDER THE FEDERAL ENDANGERED SPECIES ACT

Only five species of snakes in the contiguous United States are presently listed and protected under the Act and the US Fish and Wildlife Service (FWS) included only 20 snake species in its category two (C-2, low priority) of the 1985 vertebrate notice of review. No snake species in the US are currently classified as priority C-1 and being proposed for ESA listing.

Based on its research, the EF! Biodiversity Project believes that many of these species have been improperly underclassified. Some should immediately be reclassified as C-1 and proposed for ESA listing while many other rare and sensitive snake species should be added to the C-2 classification. As many as 20% of all native species of snakes in the contiguous United States may be biologically threatened or endangered. The 1982 amendments to the Endangered Species Act require the Fish and Wildlife Service to ensure that listing priorities are scientifically sound and do not discriminate among different groups of organisms. These amendments to the Act also prohibit consideration of economic impact in decisions to list a species as Threatened or Endangered. ESA listing decisions must be based solely upon biological data! The Fish and Wildlife Service under the Reagan administration has seriously violated the Congressional mandate of these amendments. The EF! Biodiversity Project is in the process of challenging these irregularities. Many rare species of snakes in the US as well as other unknown and less popular life forms have clearly not received their fair share of attention under the Act.

In responding to a Biodiversity Project complaint on the problem, FWS stated that it "is attempting to obtain survey information as part of its evaluation of these snake species' status," but "unfortunately, some of them are among the most difficult terrestrial animals to census or

to study." A lack of data is once again being used to justify inadequate protection. Meanwhile, the last remaining habitat of a number of biologically endangered US reptiles is being destroyed.

EF! insists that FWS increase its sponsorship of snake status research for all category 2 ESA candidate species and immediately act to reclassify and protect these species under the Act. The EF! Biodiversity Project is pursuing all possible administrative remedies. STOP RATTLESNAKE ROUNDUPS NOW!

During the past few months the EF! Biodiversity Project has attempted to convince the sponsors of cruel and ecologically destructive rattlesnake roundups in Texas, New Mexico, and Oklahoma to transform their rattlesnake roundups into celebrations for snakes - events that would educate people about the true ecology and wonder of snakes. Not surprisingly, none of these sponsors have been receptive to this positive approach. However, bowing to public pressure and the threat of litigation and increasing demonstrations, some sponsors and state agencies have begun to withdraw their support for such events.

NEW MEXICO: As a money making event, a co-sponsor of the Alamogordo, NM, roundup in 1988 - the New Mexico Wild Turkey Federation - cooked and sold rattlesnake meat. Recently the National Wild Turkey Federation, Inc., in correspondence with the EF! Biodiversity Project, stated that "it shares our EF! concern over the impact of gassing of potential dens..." While the national organization pointed out that it is "very difficult to police the actions and activities of all its affiliates," it will "encourage them to look for other ways of funding the research and management work for wild turkeys in their area." Although no official word has been received from the New Mexico chapter of the Turkey Federation, we thank the national organization for its cooperation.

The Alamogordo Chamber of Commerce, apparently realizing that increasing confrontation can be expected, has written to the Biodiversity Project stat-

ing that it did not sponsor the Alamogordo Rattlesnake Roundup and that they have received "many calls expressing displeasure with the event." The major sponsors of the Alamogordo Roundup, Moores Trading Post and Crystal Crafts Lapidary, 133 Highway 83E in Alamogordo, however, have vociferously stated that the rattlesnake roundups will be held again in April, 1989! In the latest exchange, Jasper Carlton formally advised Tom Moore, owner of Moore's Trading Post, that the event should now be considered subject to possible closure under court order. The EF! Biodiversity Project has conducted an initial legal feasibility study and believes that the event may violate New Mexico law.

OKLAHOMA: The Chamber of Commerce in Mangum, OK, has refused to answer correspondence on the subject of rattlesnake roundups in its town, and apparently plans to continue the snake slaughter in the spring of 89. The Oklahoma Department of Wildlife Conservation has responded to EF! concerns by stating that studies of the impacts of such events are under way - a step in the right direction. Letters to protest Oklahoma rattlesnake roundups should be directed to: Steven A. Lewis, Director, OK Dept of Wildlife Conservation, POB 53465, Oklahoma City, OK 73152.

TEXAS: The sponsors of Texas rattlesnake roundups (such as the Sweetwater Jaycees and Chamber of Commerce and Taylor Jaycees) apparently think they have the right to slaughter native wildlife with impunity. Rattlesnake roundups are planned in Sweetwater and Taylor in 1989. The Texas Parks and Wildlife Department, a singularly uncooperative state agency, has failed to answer any correspondence on this issue directed to it by the Biodiversity Project. Protest letters should be sent to Charles D. Travis, Executive Director, Texas Parks and Wildlife Dept, 4200 Smith School Rd, Austin, TX 78744.

Rattlesnake roundups in Texas remain unregulated, and by its silence, the state of Texas is condoning these tragic events. EF! intervention strategies are being developed, including the possibility of legal

action against the state of Texas for its failure to implement and enforce both state and federal conservation laws and regulations. Concerned activists should write to the governor of Texas, William P. Clement, State Capitol, Austin, TX 78711, stating that you will not visit Texas again or purchase any products produced in the state until all rattlesnake roundups are stopped.

NEW HAMPSHIRE and VERMONT: Both of these New England states have added the Timber Rattlesnake to their state endangered species lists. (The snake article in the Mabon issue incorrectly referred to the plight of the Eastern Diamondback Rattlesnake in NH and VT. It should have referred to the plight of the Timber Rattlesnake. No, Hurricane Gilbert did not sweep Florida's fauna northward!) The Nature Conservancy's Vermont field office is working with landowners to protect the last remaining Timber Rattlesnake denning sites in the state.

GENERAL COMMENTS:

State and federal agencies should take steps in advance to prevent the need for listing species under the Endangered Species Act. The time to protect species is when habitats are still available and population levels are healthy. The most effective way to preserve all natural diversity is preservation of large, natural, diverse ecosystems.

The Earth First! snake defense campaign has demonstrated that state laws and regulations for the preservation of wildlife need to be improved and expanded, particularly for non-game species. Both state and federal legislation is needed to regulate or halt the commercial taking and use of native insects, plants, fish, birds, amphibians, reptiles, and mammals.

To contribute to the snake campaign and other efforts of the Earth First! Biodiversity Project, send checks to the Project, or to the EF! Foundation earmarked to the Biodiversity Project (addresses in Directory). Donations to the Foundation are tax deductible.

-Jasper Carlton

Corps Threatens Mississippi's Richest Wetlands

by Alex Antypas

The following is reprinted, slightly condensed, from Audubon Activist, 7/8-88. This is one of the most informative and action-oriented environmental periodicals available. It is published bimonthly and costs \$9 per year from National Audubon Society, 950 Third Ave, NY, NY 10022. -ed.

At a time when duck populations have plummeted to historic lows and the United States and Canada have signed a bilateral management plan to boost their numbers, the Army Corps of Engineers is bulldozing ahead with a 50-year-old wetland drainage program in western Mississippi that would devastate the state's number-one waterfowl wintering area. The plan threatens half of the four-million-acre Yazoo River Delta, and even reaches into the Yazoo National Wildlife Refuge. The Corps seems bent on completing the project in spite of strong opposition by conservationists, hunters, and farmers. If completed, it would be the most extensive drainage project in this country's history and, at an estimated cost of \$2 billion, one of the most expensive.

Broad authorization for draining the Yazoo Delta was given by Congress in 1936. The Corps has since devised four projects that will have the cumulative effect of diverting massive amounts of water from the upper to the lower Yazoo Delta and into the Mississippi River.

The main purpose of the projects was to create tens of thousands of new farmable acres. When the project was authorized, the country was experiencing an agricultural boom and only a fraction of the nation's land currently under the plow had been cultivated. However, in this era of agricultural overproduction and multibillion-dollar federal farmland reduction programs, expanding farmland is at best questionable. The price of the Yazoo Delta's two major crops, cotton and soybeans, is so depressed that farmers now have to carefully consider whether it is economically prudent to harvest their crops. After draining delta wetlands, the

government may well end up paying farmers to keep out of production those very fields that it spent \$2 billion creating.

The other stated reason for the project was to alleviate flooding in the city of Greenville, which the Corps' engineers assumed was caused by the watershed above the city. In the meantime, however, Greenville's leading civil engineer has discovered that the real problem in the city is an inadequate internal drainage system. He contends that upgrading Greenville's sewers, clearing away trash, and improving existing drainage can keep the water out of the streets at a far lower cost than hundreds of miles of channels, levees, and drainage structures.

Times have changed since the Yazoo projects were authorized. After destroying more than 50% of the wetlands in the US, we have discovered how vitally important these areas are. As well as providing desperately needed habitat for wildlife, wetlands protect water supplies, filtering out toxic substances and recharging aquifers. They also sponge up floodwaters, releasing them slowly, thereby preventing flash-floods. Americans are finding new enjoyment in the recreational use of these rich ecosystems. Authorizing such a project today would be unthinkable, especially in the light of recent laws designed to preserve wetlands, such as the "swampbuster" provision of the 1985 Farm Bill, which denies federal subsidies to farmers who drain wetlands.

For its part, the Corps claims not to have a master plan for the Yazoo Delta. Its four major projects in the Delta are ostensibly independent. However, the truth is that its three Upper Yazoo Basin projects and Black Bayou project constitute one whole, interrelated effort. Having lost in the 1970s the battle to build a massive plant near Vicksburg to pump water accumulating behind levees into the Mississippi, the Corps turned its attention to these four drainage projects, which had thus far been a well-guarded secret. Without anyone aware of what it was up to, the Corps was creating a situation that would push so much water toward the

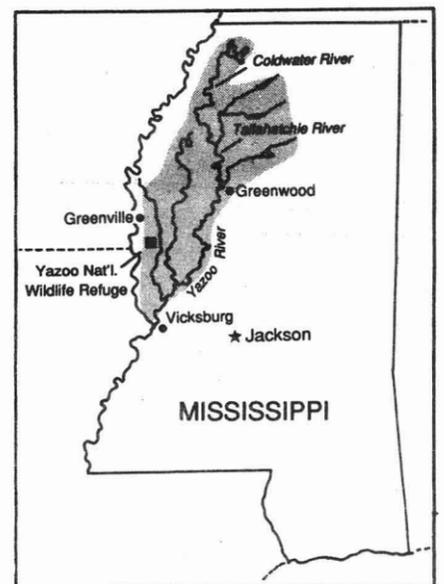
levees that it would eventually be necessary to build the pumps after all. One way or another, the Army Corps of Engineers was going to have its way in Mississippi.

The environmental costs of the project promise to be staggering. Two million acres of wetland would be lost or degraded, more than 30,000 acres of bottomland hardwood forest would be destroyed by construction, and wintering habitat for waterfowl in the area would be cut by 50%.

Even protected wildlife areas are not safe from the bulldozers. In the mid-1970s, the Fish and Wildlife Service agreed to let the Corps build a flood control channel through the Yazoo National Wildlife Refuge in exchange for mitigation work to divert toxic farm runoff from the refuge. But the FWS didn't get what it bargained for. The Corps has done more damage than it had indicated it would do. It has already cut a six-mile-long, 1600-foot-wide swath through virgin forests in the refuge. The cut timber was then burned because the FWS was not notified far enough in advance to allow it to harvest and sell the trees. A cloud of black smoke hung over the Delta for weeks afterward, while the Corps dug the ditch that drained 75% of the water out of Swan Lake, the heart of the refuge.

The Corps recently let it be known that it does not intend to do the \$12 million worth of mitigation work it promised until the project is complete. If the Corps follows this timetable, Swan Lake will remain drained for 10 to 15 years, and the refuge will be virtually worthless for the waterfowl it was created to protect. The FWS has warned that it may revoke the Corps' permit to work in the refuge if it does not begin the mitigation work immediately, but the Corps has given no indication that it is willing to do this.

Fortunately, the Fish and Wildlife Service is not alone in defending the interests of wildlife. A movement has emerged to temporarily halt the projects so they can be reevaluated and reformulated to meet contemporary needs. On the local level, the Citizens' Committee to Save the Yazoo, supported by hunters, landowners



Yazoo Delta. The Army Corps of Engineers is determined to go ahead with a series of water-control projects in the Delta that will degrade 2 million acres of wetlands. MAP BY MARGARET MCWETHY

whose property is being condemned, farmers whose most productive fields are being destroyed to make room for channels, and environmentalists, is fighting the project. The Mississippi Audubon Council is gearing up to educate Mississippi chapter members, the public, and state politicians of the boondoggle in their back yard. The National Coalition to Save the Yazoo Delta was recently formed; it is currently composed of eight environmental organizations, including the National Audubon Society.

Mississippi Congressman Trent Lott has called for reevaluation of the project and the governor has been lending a favorable ear to project opponents' arguments. Whether the Corps likes it or not, the time has come to acknowledge the changed world of the 1980s.

Contact Larry Thompson in Audubon's Southeast regional office (NAS, 928 N Monroe St, Tallahassee, FL 32303; 904-222-2473) if you'd like to receive updates on the Yazoo. Also, funds are needed to support the effort; send checks to the Southeast regional office.

Pacific Northwest Forestry and Old Growth

by Reed F. Noss

Old growth. Only wilderness, wildness, freedom, naturalness, biodiversity, and Earth itself compete as Earth First! ideals. They're essentially all the same, of course, and all are endangered. But no battle is more urgent, or more fierce, than the defense of the old growth forests of the Pacific Northwest.

Although I have been a student of forests for decades, I had never experienced the old growth forests of the Pacific Northwest until this August, when I went to Corvallis, Oregon, to speak at an old growth symposium, sponsored by the Oregon State University College of Forestry, and the International Union of Forestry Research Organizations. I was replacing Larry Harris on the program (a daunting task), and presenting ideas from a paper we are co-authoring. The audience was mostly foresters, from the Forest Service and other agencies, the timber industry, and several foreign countries. The speakers were mostly Forest Service scientists and Oregon State forestry faculty. The symposium included three days of field trips to the Cascades and the Coast Range, and two days of formal talks.

The purpose of the symposium seems to have been to educate foresters about the values of old growth. I think it succeeded admirably. Early in the week, timber industry dolts kept asking commodity-oriented questions, occasionally challenging the field trip leaders' ecological statements about old growth. But the broader view ultimately prevailed, and by the end of the week I didn't hear a peep out of the board-footed simpletons. Clearly, they were overwhelmed by the complexity of interactions and values that distinguishes old growth. Below, I review several major themes in the current ecological understanding of old growth forests, as presented at this landmark symposium.

OLD GROWTH IS NOT JUST A STAND

Forest management typically focuses on the "stand," which can be defined as "a contiguous group of trees sufficiently uniform in species composition, arrangement of age classes, and condition to be a distinguishable unit" (Smith 1986). Not only have foresters often focused narrowly on single stands, but old growth is usually defined along a single dimension — time. But is old growth equal to old age? Is old growth really just a successional stage?

Several speakers emphasized a broader, multivariate view of old growth. Speakers Jerry Franklin and Tom Spies both noted that whereas age might be the best single criterion of old growth, it is not totally satisfactory because structural features of old growth develop over different time periods, depending on site conditions and history. Other criteria, such as characteristics of overstory, tree condition, debris, understory, and various multivariate combinations of these characteristics, are necessary to distinguish old growth forests from mature forests. I noted that the old growth stage of forest development is characterized by the senescence and death of many trees; hence, the canopy begins to degenerate and trees fall over, forming gaps. These small disturbances fractionate the old growth forest into a mosaic of smaller patches, incorporating at a fine scale many elements of the preceding stages of forest development that follow a major disturbance. Over long time scales, larger disturbances impose heterogeneity of a coarser grain upon the old growth landscape. A rich intermingling of these fine-grained and coarse-grained patterns (small patches and large patches) determines diversity at a landscape scale. Focusing at the scale of a single, "undisturbed" stand overlooks much of this diversity.

In pre-settlement times, about two-thirds of the forest in the Pacific Northwest was in old growth condition, with most stands between 250 and 750 years old. The remaining one-third of the landscape was in earlier stages of natural succession, interdigitating with old growth in a mosaic pattern. Each patch in this "space-time mosaic" (coined by A.S. Watt in 1947) represents a stage in a continuous cycle of forest degeneration and regeneration. Life and death are intertwined. We might point to the old growth patches (stands) and say they are of special value, ignoring the rest of the mosaic. But that would be artificial, because all patches in

the mosaic are part of an interdependent pattern-process. Moreover, the native fauna and flora collectively require multiple habitat types, and the disturbances that create them. Natural successional areas (e.g., unsalvaged blowdowns and burns, and alder forests) are at least as rare and valuable as old growth, and are not effectively mimicked by clearcuts and other anthropogenic disturbances.

The traditional view of old growth as undisturbed is being discarded, even as scientific interest in the ecology of natural disturbance is expanding. Canopy gaps formed by limbfalls and single or multiple treefalls are now seen as critical sites of forest regeneration, containing increased resource levels for both plants and animals. Flowering and fruiting of understory plants are enhanced in gaps, insects reach higher densities in gaps, and birds and other vertebrates cue in on these resources. Smokey the Bear is unpopular

acres). In addition, each hectare may contain over 200 metric tons of coarse woody debris. Much of this material is in snags: standing, dead trees that provide essential habitat for cavity-nesting birds and mammals, and preferred perching and food-handling sites for raptors. But about half of the coarse woody debris in an old growth forest is in the form of downed logs in various stages of decomposition. Some 30% of the upper 30 centimeters of soil in an old growth forest in the Pacific Northwest is decaying logs. These logs act as giant sponges, soaking up and retaining so much moisture that, even after extended droughts or catastrophic fires, one can easily squeeze out water from a handful of decaying wood.

Foresters have traditionally looked at coarse woody debris as dead, wasted board-feet. But in reality, there are more living cells (about 40% by volume) in a dead, downed log than in the bole of a



photo by Reed Noss

"Clearcut of the future" with four to six old growth trees per acre plus coarse woody debris left on the site. A row crop of Douglas-firs will be planted on this site, but is no substitute for an old growth forest.

among ecologists these days. The important role of frequent (4-12 year return interval), low-intensity ground fires in Ponderosa Pine communities of the Eastern Cascades (and elsewhere) is now well known. Dave Perry pointed out that most natural fires in the Douglas-fir forests of the Western Cascades are not cataclysmic, stand-replacing fires, but are light fires that recur at 20 to 50 year intervals, killing few old growth trees but enhancing patchiness of the understory. Unfortunately, these diversity-enhancing fires are the ones most easily suppressed by forest managers still afflicted by the Smokey the Bear mentality. Meanwhile, whereas old growth is relatively resistant to both fire and insect outbreaks, we are filling the landscape with young, dense plantations, which are most susceptible to catastrophic burns and insect pests.

Among foresters, I see many positive trends: the stand is giving way to the landscape, vision is being expanded in space and time, previous biases against natural disturbance are being repudiated, and forestry is maturing into forest ecology. Many speakers felt that the old growth concept is limited, and needs to be replaced by broader concepts of "natural forest," "natural vegetation," or "landscape mosaic." To me, this expanded ecological understanding reinforces the argument for Big Wilderness. **DEAD TREES ARE MORE ALIVE THAN LIVING TREES**

Old growth forests of the Pacific Northwest are noted for their incredibly high biomass, often exceeding 1000 metric tons of above-ground biomass per hectare (2.47

living tree (about 5% by volume). The life in a downed log (and in surrounding organic soils derived from coarse woody debris) is largely mycorrhizal fungi and nitrogen-fixing bacteria, both of which the forest needs to survive. The fungus forms a symbiotic association, called mycorrhizae, with tree roots, which benefits the tree by enhancing uptake of water and nutrients. In turn, the fungus receives photosynthesized sugars from its host. Nitrogen-fixing bacteria rely on a mycorrhizal fungal extract for food, and reciprocate by providing both the fungus and the tree with nitrogen — the most limiting nutrient in these old growth forests — which the bacteria convert from atmospheric form to a biologically usable form. (Another major nitrogen-fixer is *Lobaria*, a foliose canopy lichen.) Other key players in this symbiotic drama are the rodents, such as California Red-backed Voles and Northern Flying Squirrels, which subsist on the fruiting bodies of mycorrhizal fungi (mushrooms and below-ground truffles), and disperse the spores in their feces. This story, worked out in large part by former BLM biologist Chris Maser and associates, becomes more intricate and fascinating with each new study.

Dead, downed logs thus serve as important "nurse logs" for new generations of trees, as tremendous water storage reservoirs and nutrient pumps, as enrichers of soil, and as providers of microhabitats and niches for a variety of plants and animals. Old growth forests, with their huge boles and relatively high tree mortality rates (0.5-1% per year), are the most significant producers of coarse woody debris. Over

60% of the annual litterfall in old growth in this region is in the form of woody debris. Yet the prevailing silvicultural practice, after clearcutting old growth, is to remove as much woody debris as possible before planting row crops of trees. Even if a considerable amount of debris remains after the initial harvest (as in some modern National Forest clearcuts), subsequent plantation trees on short rotations (generally 60-80 years for Douglas-fir) contribute little new wood, so the system is progressively impoverished and robbed of future productivity with each rotation.

Salvage logging after natural, large-scale disturbances, such as fire and windthrow, is a particularly pernicious robber of coarse woody debris. Natural fires, such as the notorious Silver Fire in the Siskiyou National Forest in 1987, usually are patchy, mosaic burns that enrich forest heterogeneity and stimulate rapid regeneration of plant cover. Those trees that are killed are not completely burned — the coarse woody debris remains in the system. Speakers at this symposium either expressed extreme reservations about salvage logging, or rejected it outright. Jerry Franklin, at an old growth session at the AIBS conference in Davis, California (immediately preceding this symposium — see accompanying article), stated that salvage cutting can lead to rapid deterioration of the old growth ecosystem. Yet the Forest Service is salvaging timber at nearly every opportunity, and the timber industry is campaigning for even larger salvages. In the case of the Silver Fire, the FS proposes to salvage approximately 157 million board feet from 9500 acres, but the industry wants more. When an agency ignores its own staff's best scientific advice, and yields to pressure from ecologically ignorant economic interests, you can be sure that the bureaucracy (not the old growth) is decadent.

STREAMS, ESTUARIES and OCEANS NEED WOOD, TOO

Not long ago, fisheries managers spent a lot of time and money removing logs and other debris from stream beds, thinking that these materials impeded salmon migration. They were wrong. Coho Salmon, for example, emerge as fry from eggs buried in gravel deposits of old growth streams, spend their first year in the streams, migrate to the ocean, and finally return as three-year-olds to spawn in the streams of their birth. Conifer logs, which decompose more slowly than deciduous debris, accumulate and cause log jams, which in turn provide cover and protection for salmon and other aquatic life; they also trap sediments. Water quality is thereby enhanced and spawning habitat is created. Water cascading over fallen logs digs pools in the stream bed, which provide resting places for migrating salmon, and refugia during hot spells and droughts, when stream flow is reduced.

In logged watersheds, where woody debris has been removed or gradually declines because its source (big trees) has been eliminated, major changes occur in the composition of dominant fishes. As pointed out by Jim Sedell, the stream environment is simplified, floods are more severe, and year-to-year variability in fish and invertebrate populations increases. Comparing stream reaches in Wilderness and logged areas, Sedell found a major decline in pools in logged areas (from 74% to 22% of stream length). Stream edge, which provides winter-spring habitat for over 90% of salmonids, also greatly declines in length in the simplified stream reaches with less woody debris. Sedell also noted that salvage logging of debris along streams is causing a decline in the number of large pools, with deleterious consequences for stream organisms. Unfortunately, most of the Forest Service budget "for stream habitat improvement" goes toward high-tech engineering approaches, which seek to "discipline" streams, rather than toward more ecologically-sound silvicultural emulation of old growth structure and pattern.

The importance of coarse woody debris doesn't end in the small upland streams. Patricia Benner described the importance of large debris in river, estuarine, and marine ecosystems. Historically, streams and rivers flowing through old growth landscapes supplied estuaries and oceans with large quantities of wood. Navigation

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Global Warming Shrinks Biodiversity

by Reed F. Noss

Record heat; drought in some places, record rain in others; hurricanes, floods, famine. Is Mother Earth pissed off? Maybe, but it appears we are bringing most of this on ourselves. We are injecting nearly 6 billion tons of carbon (in the form of carbon dioxide) into the atmosphere annually through the burning of fossil fuels, plus other greenhouse gases such as methane (much of it from cow flatulence), chlorofluorocarbons, and nitrous oxides. Deforestation contributes another 1 to 3 billion tons of carbon to the atmosphere annually, as felled trees are burned (particularly in the tropics) and soil carbon is oxidized. These greenhouse gases build up in the atmosphere, allowing sunlight to pass in, but not letting re-radiated heat escape out. The inevitable result is global warming, at a rate probably unprecedented in Earth's history.

This is bad news for biodiversity. Indeed, bad news was the message of a World Wildlife Fund conference on "Consequences of the Greenhouse Effect for Biological Diversity," held at the National Zoo in Washington, DC, October 4-6, 1988. A remarkable convergence of scientific opinion on the greenhouse effect has taken place in recent months. The phenomenon of the greenhouse effect has been known for decades, but the consequence of global warming has been controversial. Now, scientific models generally agree that we will experience a global temperature increase of about 3 degrees Celsius in the next 50 years or so. Warming will be greatest in north temperate and arctic areas, and drought will plague many continental interiors at mid-latitudes. Thermal expansion of seawater, combined with likely glacial melting, will result in inundation of many coastal zones. Goodbye Everglades.

Conference participants agreed that climate change by itself would not be cause for great concern - climate has fluctuated continuously through geological history. The problem is that the rate of change is predicted to be 10 to 40 times faster than natural climatic fluctuations. Moreover, habitat fragmentation has destroyed natural dispersal corridors, leaving populations in small refugia, "man-locked" in a hostile landscape. The combination of rapid climatic change and fragmentation means that only the most vagile, weedy species and genotypes will be able to track shifting climatic zones by dispersing

across large, artificial barriers imposed by development. These are the very species that thrive on human disruption of the environment, and do not require conservation attention. Less vagile, more sensitive species face almost certain extinction as the small, isolated reserves they inhabit become climatically unsuitable. Larry Harris noted that, in Florida and other low coastal areas, many species will be trapped "between the devil and the deep blue sea," i.e., rising sea level will inundate wetlands at the same time that virtually all upland habitats are usurped by commercial and residential development.

A procession of speakers discussed depressing predictions of the effects of rapid climate change on particular ecosystems and groups of organisms. We learned that environments in general will become more homogeneous, and species richness will be impoverished. Disturbance regimes will be altered, resulting in pronounced changes in vegetation structure. In the tropics, although temperatures are not expected to increase significantly, changes in the seasonality of rainfall could have dramatic effects on the fine-tuned biological communities there. According to Andy Dobson, parasites and pathogens, which generally disperse very well, will move into new regions and cause epidemics. Other areas will lose parasites that play important ecological roles. For example, the tsetse fly (carrier of trypanosomiasis) is expected to disappear from much of equatorial Africa, removing one of most important impediments to human settlement and overgrazing of this region by domestic cattle, which are much more sensitive than native ungulates to trypanosomiasis. For reptiles with environmental sex determination (crocodilians, many turtles, and some lizards), the sex of developing embryos is determined by the temperature of the egg. If climate warms rapidly, sex ratios could be drastically skewed, resulting in reproductive failures and possible extinctions. Increasing temperatures are also expected to increase the toxicity of pollutants to many organisms. The sum effect of all these changes will be an impoverishment of biodiversity at genetic, species, and ecosystem levels of organization, throughout the biosphere.

As Paul Ehrlich and John Holdren pointed out years ago, the basic greenhouse problem is described by a simple equation: total CO₂ emission = CO₂/

interactions that compose these systems. The truly cautious scientist will take a prudent approach to cutting old growth, i.e., don't cut any until we know precisely what the effects will be, and know for certain that these systems can regenerate on logged sites. Folks, we don't know Jack Shit, and only about 2% remains of the virgin forests that existed when Europeans first entered this continent.

Yet Forest Service officials are loath to discard their principle of nondeclining yield. Draft plans for the 12 National Forests in the Pacific Northwest actually call for increasing logging by 15% over recent yearly levels. About 170 acres of old growth in this region are logged each day, and at least 50% of the remaining old growth will be destroyed within 50 years, if the Forest plans are implemented. The FS shows minor willingness to experiment with new cutting methods and patterns recommended by their ecologists, but apparently only if the total volume of timber produced increases, or at least does not decline. FS ecologists are currently recommending the retention of coarse woody debris, snags, and at least 4 to 6 living trees per acre, on clearcut sites; hence, these experimental sites (one of which I observed at the H.J. Andrews Experimental Forest) resemble a shelterwood cut, although artificial regeneration (planting) is still used instead of natural seeding. These "clearcuts of the future" are no doubt preferable to traditional clearcuts, but there will still be a net loss of coarse woody debris, nutrients, and native biodiversity over subsequent rotations.

Another recommendation from Forest Service ecologists is to aggregate clearcuts, rather than dispersing them throughout the landscape. This "non-fragmentation alternative" is designed to minimize edge effects and other deleterious consequences of the prevailing "checkerboard" cutting pattern. I noted in my

technology x technology/capita x population size. A similar equation would apply for each of the other anthropogenic greenhouse gases. Add to this the massive scale of deforestation, and the source and extent of the problem are clear. Speakers noted that what needs to be done is also clear. George Woodwell insisted that we need an immediate reduction, by at least 50%, in the burning of fossil fuels, an immediate end to deforestation, and reforestation of at least 2000 square kilometers per year. Norman Myers stated that it is quite feasible to reforest 2 million km² in the tropics within 10 years. This would cost only about \$10 billion per year (which should be contributed by the developing countries), far less than the costs associated with massive crop failures, rising sea levels, political chaos, and other problems brought on by a rapidly changing climate. Conference participants agreed that a reduction in the human population is also necessary, and that scientists must get out of their ivory towers and become advocates of revolutionary change in environmental policy.

Even if all efforts that must be initiated now to stem global climatic change are indeed made, we undoubtedly have begun too late to prevent a major disruption of biodiversity. Speakers agreed that the prevailing, piecemeal conservation strategy of small, isolated reserves will be a disaster under the coming scenario. As recommended by many speakers and articulated in depth by Larry Harris, a viable conservation strategy must build multiple, large reserves connected by broad habitat corridors (particularly in a north-south trend; Jamie Sayen's proposed PAW - Preserve Appalachian Wilderness - system of connected reserves from Maine to Florida is an ideal strategy). Speakers also noted that all multiple-use public lands, such as Forest Service and BLM lands, must be managed with biodiversity as the primary objective, so that they will be suitable as refuges for species when existing, more strictly protected lands (National Parks, Wilderness Areas, etc.) become climatically unsuitable. There was general, though reluctant, agreement that direct human interventions, such as massive translocations of species and genotypes, will be necessary because the rate of climatic change likely will be more rapid than species could adjust to even in the wildest of landscapes.

It will be a vastly different world. Some

talk that enhancing landscape connectivity by clumping forest patches, minimizing barriers (such as barren clearcuts), and providing broad habitat corridors, is also necessary to counter the isolating effects of fragmentation. Jerry Franklin concluded that old growth fragments smaller than 300 acres are not ecologically viable for long, and a 40 acre patch is all edge; by these criteria, some 40% of existing old growth in the Pacific Northwest may be non-viable. Research is needed on the trade-offs between dispersing and aggregating clearcuts, the minimum size of openings at which edge effects occur, and other questions related to how well the human-imposed disturbance regime mimics the natural disturbance regime, but the FS has not chosen to provide funding. Most of the research at the H.J. Andrews Experimental Forest and other sites is funded by the National Science Foundation, not the Forest Service.

Although ecological research on forestry practices and patterns will hopefully be of use for designing future harvests of secondary and tertiary forests, and for mitigating damage already done, there is no justification for harvesting even one more acre of existing old growth. To the contrary, every shred of ecological evidence supports the view that we have already cut far too much. We can only hope that more ecologists and foresters will be prudent enough to admit that our fundamental ignorance of these intricate systems demands that we get busy attempting to restore what we can.

Reed Noss is a community ecologist and frequent contributor to our pages. This and Reed's complementary article were made possible by the Earth First! Journal Research Fund. Tax deductible contributions sent to the EF! Foundation (POB 50681, Tucson 85703) and earmarked to the Journal Research Fund make possible quality ecology reports such as these.

optimists believe that political change can happen quickly enough to avert this disaster. Another breed of optimists is counting on AIDS, and other natural catastrophes, to bring our population and technology down to where we ideally would head through our intelligence and foresight. We'll see.

Letters . . .

Continued from page 4

log it themselves, but of course 23,000 spiked trees provide some insurance. Why are we so afraid of land claims? The natives were far better caretakers and stewards for the land before we got here, and they certainly couldn't do any worse.

-C.J. Hinke, British Columbia, Canada

Dear Editors,

Howie Wolke's Forest Service Primer is a fair and accurate assessment of the Forest Service and an excellent source of information, though its level of hostility and lack of documentation seem to make it less effective a tool for FS change than it might be otherwise.

The primer is suitable for the EF! audience as it assumes certain perspectives and levels of knowledge most of its readers, I assume, have arrived at experientially or intuitively. We can read it for what it's worth, in spite of and (or) in gut level support of all the hype/truth.

Your average forest user, public official, media person, or mainstream environmentalist probably won't understand the force of Wolke's hostility and, consequently, will ignore his legitimate diatribe because it flies in the face of our culturally programmed response to hollering - "it's not rational and therefore not worthy of my attention."

While the FS is "a bloated and intractable bureaucracy" in need of revamping, it is still composed of people just doing their jobs to survive. The average person's empathy will lie with them (FS employees) once you get beyond the faceless level of bureaucracy, a tendency that seems to be ignored in the EF! movement. Granted there may be no excuse for ignorance, indifference, sloth, and parochialism, and certainly not hostility or fraud, problems exacerbated by the FS's monolithic proportions, but we are all subject to such pitfalls for reasons of self-interest, which include maintaining our worldviews. This seems particularly true when times get more complex, confusing, and desperate as is happening daily.

I'm no apologist for the FS (in fact I volunteered with them one summer and quickly discovered I didn't want to be a part of that organization); it needs drastic restructuring and redirection (a la Howie Wolke!), but you ought to treat others as you would hope to be treated yourself, not made out to be a villain when you're just doing your job as you see it. You and I know, for instance, it is not villainous to spike an 800-year-old Doug fir in imminent danger of extinction.

So what to do? I don't think there's any changing the radical EF! mystique in the short-term, but with a bit less righteousness and greater acknowledgement of human concerns, people's perception of radical might change - "the Forest Service must be stopped" and the EF! National Forest Biocentric Management Plan implemented."

-Kelly Brennan, Chatham, PA

Dear Miss Ann Thropy and EF!

No one can deny the serious threat that overpopulation poses to planetary survival. Embracing AIDS as a cure for human overpopulation, however, or simplistically stating that Gaia is utilizing AIDS in self defense, can have serious philosophical and political ramifications for EF!

I recommend reading Robert Lederer's articles on AIDS in *Cover Action* #28 and 29 (summer 1987 and winter 1988, *Cover Action Information Bulletin*, POB 50272, Washington, DC 20004). In great detail and with extensive documentation, Lederer examines six theories of AIDS origin, most of which have been either ignored or suppressed by the media. Pointing out strengths and weaknesses in each theory, Lederer analyzes the "standard" HIV theory, as well as genetically-engineered HIV, dioxin connections, maguari and dengue viruses, African Swine Fever Virus, and a multiple factor theory.

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Old Growth . . .

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along rivers and coastal areas was often exceedingly difficult, due to the accumulations of logs. The US Army Corps of Engineers has removed the logs from the channels of most tidal rivers. With logging of old growth, the long-term source of this debris also has been drastically reduced, and the volume and size of logs transported to the coast has been steadily declining. There has been a 76% loss in volume of wood on Oregon beaches from 1970 to 1985. This is due not only to logging, but also to removal for firewood.

Coarse woody debris serves essential functions in estuaries and oceans, such as enhancing structural complexity and species diversity, providing perching sites for birds and sea lions and nurse logs for growth of woody plants in estuaries, stabilizing beaches, protecting cliffs from erosion, developing spits and dunes, and providing a carbon (food) source for wood-boring marine organisms, including several species of mollusks and arthropods. Entire food webs are built on the deep ocean floor hot-spots where old growth logs come to rest. Whole communities in the marine benthos may now be endangered by the liquidation of old growth forests hundreds of miles away.

WHAT SHOULD WE DO ABOUT OLD GROWTH?

Every Earth First!er knows the answer to this question: save it all and grow back as much as we can! Scientists, however, are cautious by nature (or, at least, by training). Especially when they work for the Forest Service, they may hesitate to state the obvious. Yet the impression I got from nearly every speaker is that we have already cut too much old growth in the Pacific Northwest, especially considering how ignorant we are of the myriad

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Scientists Dig Into Biodiversity

by Reed F. Noss

What is the current scientific understanding of biodiversity? What do scientists recommend we do to protect biodiversity? What are scientists themselves doing to protect biodiversity?

These are difficult questions, almost rhetorical, but I saw a chance to obtain some answers at the 39th Annual Meeting of the American Institute of Biological Sciences (AIBS), August 14-19 at the University of California at Davis. The theme of the entire conference this year was "Biological Diversity." Thousands of scientists attended, representing some 16 professional scientific societies, including the Association for Tropical Biology, the Botanical Society of America, the Ecological Society of America, and the Society for Conservation Biology.

Rather than trying to answer directly the questions posed above, I will review a few major issues that emerged at the conference. These issues have to do with changing perspectives within biological science, about how natural areas function, about the objectives of conservation, and about the scientist's role in conservation. **DISTURBANCE IS GOOD?**

In the old days of ecology and resource management, natural disturbance had a bad name. The archaic and naive "balance of Nature" idea evolved into theories of community equilibria, which dominated ecological thought until very recently. In these theories, natural disturbance was seen as external to the system, as something destructive that reset the successional clock. Disturbance was not seen to play a role in the internal workings of the harmonious, equilibrium system. All that has changed. Ecologists now recognize natural disturbances as integral to maintaining diversity in natural communities. (For a good summary of the modern view, see *The Ecology of Natural Disturbance and Patch Dynamics*, edited by S.T.A. Pickett and P.S. White, Academic Press; also see my accompanying article on old growth.)

The most interesting symposium at this year's AIBS conference, to me, was one entitled "Natural Disturbance and the Management of Wilderness Ecosystems." Peter White, from the University of North Carolina, introduced the topic by discussing the paradox of natural change in lands that we seek to preserve, complicated now by anthropogenic habitat fragmentation, extirpation of large predators, introduction of alien weeds (both plant and animal), wide-ranging pollutants, and climatic changes that affect even the most remote wilderness areas. Few areas are large enough to incorporate the natural disturbance regime and maintain stability of habitat patch proportions over time (millions of acres of essentially intact, unfragmented habitat would be required for many ecosystem types). The less stable the patch dynamics, the greater the fluctuations in populations and therefore the greater the probability of extinction. Hands-on management of wilderness becomes an unfortunate necessity to prevent biotic collapse. When reserve size is small relative to potential disturbances, more intense management will be necessary.

Some disturbances cover vast areas, a prime example being the Mount St. Helens blast that converted 350 square kilometers of coniferous forest into a series of disturbed habitats ranging from bare mud and ash to standing, dead trees. As noted in a talk by Peter Frenzen and Fred Swanson, with the US Forest Service, here was a splendid opportunity for scientists to study natural recovery after catastrophic disturbance. Unfortunately, the politics of greed held sway over science, and preserve boundaries for the National Volcanic Monument were based partly on timber volume in disturbed habitats, so that salvage logging could occur in profitable areas. Habitat modifications to reduce damage to human property down-slope, including seeding of unstable substrates with alien grass species, and construction of sediment-control dams by the Army Corps of Engineers, guaranteed that scientists would not have a natural recovery to investigate. Studies of biotic response to the eruption do provide some lessons for conservation: corridors of natural habitat leading to surrounding, satellite preserves should be established to provide escape routes from areas subject to large disturbances.

A particularly timely talk was by Bill

Romme, of Fort Lewis College, and Don DeSpain, of Yellowstone National Park, on fire management in Yellowstone. Major problems in reestablishing a natural fire regime in Yellowstone, after 100 years of fire suppression, have been habitat fragmentation by roads and developments within the Park, and different fire policies (Smokey the Bear mentality) in the National Forests surrounding the Park. The fire history of the park area has been one of continual fluctuation in relative abundances of post-fire cover types since 1735. No type disappeared over this period, but neither was there a steady state in patch proportions over time, suggesting that the Park is indeed too small to incorporate a natural disturbance (fire) regime. Nevertheless, Yellowstone is one of the last areas in the temperate zone with any possibility of maintaining natural fires on a large scale.

This summer's fires in Yellowstone, which have the public so alarmed, are unprecedented this century and last, but have precedents in the 1700s. They are essentially "natural," and will benefit wildlife such as Elk and Grizzly Bears, by creating a mosaic of early and late successional stages with abundant forage. Fire suppression, however, is having a negative impact on wildlife and the ecosystem in general. The Park Service has been pressured into suppressing fires to "protect" surrounding National Forests, as well as developments within the Park. According to DeSpain, forests are being bulldozed to keep fires away from the condos and rubber tomahawks at Grant Village. And although the natural fires pose no threat to Grizzlies and other large mammals, individuals are getting trapped in the "burn-out rings" created by suppression backfires. Much of the blame for destructive fire suppression tactics must be placed on the press, which has irresponsibly agitated the public by describing the Yellowstone fires as "devastation," instead of taking the opportunity to educate the public about the role of fire in natural ecosystems.

A lesson from the talks on natural disturbance is that our management of the landscape should not impose novel disturbances (or lack of disturbances!) on a biota that has evolved over millions of years, interacting with a particular regime of natural disturbance. To the extent possible, we should mimic the natural disturbance regime. As Doug Sprugel from the University of Washington put it, bureaucratic rules must be made to conform to biological rules. But it would be "swimming against the tide," in Sprugel's words, to attempt to maintain a natural area just as it was described by the first white explorers, because disturbance regimes are themselves non-equilibrium and dynamic. Nothing in Nature is static. Maintaining natural processes (e.g., disturbance, recovery, hydrology, evolution, mountain-building), then, must take precedence over maintaining any particular pattern (e.g., a particular species composition or vegetation structure). **IN AND OUT OF NATURE RESERVES**

One general concern among biologists, as expressed at this conference, is that existing areas reserved for conservation, and those likely to be set aside in the near future, are far from adequate to maintain biodiversity. As noted by Jim Brown of the University of New Mexico, most organisms nowadays inhabit the "seminal matrix" that is neither city, farm, nor wilderness, but rather multiple-use land showing varying degrees of naturalness. Worldwide, nature reserves of various types (national and state parks, wilderness areas, etc.) constitute less than 1% of the land area. Agricultural and urban areas claim another 12% or so. This leaves over 85% of the world's land area as seminal matrix that is being used by humans to harvest natural resources (i.e., grazing, timber, mining, hunting, fisheries). In the United States, these lands include both private property and government land managed by the Bureau of Land Management and the Forest Service.

The problem is that biologists, both "basic" researchers and conservation specialists, have tended to focus on "pristine" areas inside reserves, leaving the rest of the landscape to the planners, architects, developers, and others who care little about the distribution and status of nonhu-

man organisms. The few biologists in environmental regulatory agencies have little voice against their bosses, who are often civil engineers or real estate agents who couldn't make it in private enterprise. The seminal matrix, and most of its biological diversity, is falling through the cracks. The obvious solution to this problem, which I discussed in a talk, is to break down the barrier between conservation and land-use planning, and to approach the land as one entity. This means integrating conservation and development, but in such a way that biodiversity—the whole—always takes precedence, and that sensitive areas are thoroughly protected.

There is nothing startlingly new in these ideas; Aldo Leopold worked most of his life trying to maintain "land health"



both in and out of nature reserves. What is new, is that more biologists are beginning to approach the landscape in a holistic way. Unfortunately, purists in the sciences still regard "applied" research as intellectually inferior, thus discouraging many talented biologists from doing anything non-esoteric. Worse yet, when attempts are made to integrate conservation and development, as in the United Nations' Man in the Biosphere program, the latter always seems to come first. The IUCN (International Union for the Conservation of Nature and Natural Resources) now advocates "sustainable development" over preservation of Nature for its own sake. Preservationists, however, have also been at fault, by ignoring areas that do not appear "pristine," by misunderstanding natural disturbance, and by failing to recognize the need for management (and restoration) in even the wildest areas. It's time to face the real world: human influences are everywhere; we can no longer assume that wilderness is sacrosanct or separate from non-wilderness. The conservation of biodiversity demands that we deal with the whole Earth as one system.

SCIENTISTS HAVE TO GET THEIR HANDS DIRTY

The conservation of biodiversity also demands that scientists get their hands dirty (or bloody!). The ideal of sitting in an ivory tower, objectively testing hypotheses but never advocating anything, is incompatible with conservation biology. The role of "opinion" in conservation biology, however, is currently a matter of great controversy. Some purists demand that scientists only supply the facts, and never recommend anything about how they may be applied. But in the political arena, or indeed any time a development is planned, all the special interests will be there shouting their opinions; the only true general interest—preservation of biodiversity—is often poorly represented. Ecological scientists, by virtue of their training and experience, might best represent biodiversity; yet they too often hesitate to get involved, for fear of tainting their scientific credibility (a good discussion by Arne Naess about why scientists hesitate to get involved is in *Conservation Biology: The Science of Scarcity and Diversity*, edited by M.E. Soule, Sinauer Associates).

Many talks at this conference demonstrated that biologists finally are getting involved, and are making specific policy recommendations. But there is still a tendency to want to appear reasonable, and not ask for too much. Jim Brown, for example, chided scientists to "use our

heads instead of our emotions," and to use sound scientific and economic criteria to allocate limited resources among alternatives. Some species, Brown noted, may be ecologically redundant, so we can afford to lose them. Tom Lovejoy, of the Smithsonian Institution, found Brown's implicit "triage" approach to be "offensive and dangerous," however. Lovejoy emphasized that we are ignorant as to what is or is not useful, and need to set our conservation targets high, regardless of cost. The more we ask for, the more we'll get. American society, at least, has no shortage of money that could be applied to conservation (witness our defense and welfare budgets).

Unfortunately, politics are affecting biology more than the other way around. Speaking on reintroduction of Gray

Wolves, Jim Peek of the University of Idaho noted that at least three areas are biologically suitable right now: northwest Montana (where a natural recovery is already under way, but jeopardized by control efforts), central Idaho, and Yellowstone National Park. In Montana and Idaho, the Elk hunter lobby may be strong enough to prevent reintroduction of wolves. Because wolves and hunters would be additive mortality factors for Elk, Elk harvest levels would have to be reduced to accommodate wolves. Hunters don't like that idea. In Yellowstone, as readers of this journal know well, wolf reintroduction has been sabotaged by the welfare ranchers and their political cronies in the Wyoming Congressional delegation.

These problems of politics superseding science can be solved only if many more scientists "plunge into the public policy debate," noted J.P. Myers of the National Audubon Society. When asked by a member of the audience if the radical environmental groups are hurting the credibility of legitimate conservation biologists, Myers replied that a diversity of niches in the environmental movement is as important as the diversity of niches in Nature. Having the full environmental spectrum, including radicals, he said, enhances the collective effort.

But are conservation biologists and other scientists doing enough to save the wilds, or does the whole biodiversity problem represent just another opportunity for research money, publications, and tenure? My impression is that most biologists, in their hearts, are truly committed to the fight, but are too weak, or afraid for their careers, to step onto the dangerous ground of radical advocacy. At a recent National Science Foundation (NSF) meeting on establishing research priorities in conservation biology, tropical ecologist Dan Janzen of the University of Pennsylvania was frustrated by the narrow focus on research. Janzen suggested that, considering the crisis we're in, scientists need to adopt a "warlike mentality." As for what are the most "intellectually challenging" issues for research in conservation, an NSF preoccupation, Janzen replied that "the answer is easy: the most intellectually challenging issue in conservation biology is how to get the academic community to stop intellectualizing conservation biology to death and get out there and actually do something about it." Right on.

Third Bioregional Congress Joined

THE GREENING OF AMERICA CONTINUED: NABC III

The wild drumbeat and songs stopped, we broke the six day circle, and the special magic of this people and place ended with farewell hugs as the inhabitants of Turtle Island (North America) returned to their homes to implement what they had just created. With joy and hope, not tears, we parted, for we remained tied together by the biological strands that interlock our homesites and lives. That connectedness is the essence of bioregionalism.

I came away from the August 21-26 1988 North American Bioregional Conference III (NABC3) feeling that a sacred act of Eaglestarr, a hosting indigenous person, caught the heart of week I had shared with 300 fantastic people, a couple of friendly goats, and several absolutely immense cedar trees. Through the kindness of the local indigenous people, many of NABC3's meetings and presentations occurred in Eaglestarr's traditional Northwest Indian longhouse located on the conference site, the North Vancouver Outdoor School near Squamish, British Columbia. On opening night, as each presentation concluded, we enthusiastically applauded, only to face Eaglestarr's plea that the clapping of hands scared away the good spirits within the building: "We must respect this sacred place. Refrain from applause."

It was one thing to appreciate the spirit of this suggestion, quite another to behave appropriately. Although by consensus we substituted a silent raising and shaking of both hands, to the end, our

deeply ingrained clapping habit still had some of us occasionally applauding and then feeling guilty.

To me, the applause tension conveys the essence of NABC3, the purpose of which was to bring together Greens and Bioregionalists to discuss governance, ecofeminism, education, spirituality, economics, health, waste, communities, water, communications, forests, racism, and other aspects of modern life. As exemplified by the withholding of applause, the conference sought to implement past and present guidelines, and thereby enjoyed benefits, for our rapport with the indigenous people was most rewarding.

Far more impressive than our thousands of words (reported in the excessively professional, five computer composed, laser printed daily papers) was the spirit, good will, and joy of community and Earth that these words conveyed. NABC3 united me with people designing a social utopia that is succeeding because it is not at odds with its planet.

The Congress evoked education of the highest order for, as the Education Committee reported, "Bio-regional Education proceeds from the premise that Earth is a community of entities that form a living organism of which we are part... it nurtures and validates affinity between the individual and planet through sensory, emotional, spiritual and intellectual channels, recognizing that the domination of people and the domination of nature have a common root." NABC3 actualized this kind of education continuously, as exemplified by:

-consensus required for all decisions made, such that before moving to other subjects, all had to understand and integrate the considerations of those with different outlooks;

-persons meditatively and magically taking on the roles of members of the plant and animal kingdoms and indicating at meetings when they felt other species' interests were misrepresented or ignored; -funding and space provided to minorities so that the forum could integrate their interests (every other speaker had to be a woman, and minority groups, including other species, could interrupt the meetings at any time to have their voices heard) -Eaglestarr insisting that we all honor our elders by having them stand in the center of the circle while everybody sang them a drum song (Cross-cultural difficulties arose when nobody entered the center because nobody wanted to be known as elderly. It became so quiet you could almost hear the arteries hardening. Finally, somebody said, "Everybody over 55 goes in," whereupon we did.);

-sponsoring All Species education wherein children became costumed representations and spirits of animals that they studied...

The list is endless, and since on all levels provisions were made for representation of Nature's workings, Earth was first. Participating in the Congress process taught us about how Nature works, for NABC3 successfully emulated Nature's peace.

The work at hand was to produce written guidelines to help make the ideal conference relationships possible globally, a difficult task at best, for words never fully capture or convey experiences. Dedicated bickering over shades of meaning led to understanding, making the guidelines well worth reading. (For \$7 a copy, Seth Zuckerman, POB 159, Petrolia, CA 95558 will send NABC3 proceedings to you by February.) They address global and personal conflicts and offer solutions.

Perhaps that which underlies our major personal and global problems is best exemplified by writing the word 'green' in red ink. What, then, does it signal, green or red? Our senses tell us red, our intellect tells us green, and in confusion, we act accordingly. To help resolve the catastrophes of modern life, in words, feelings and actions the North American Bioregional Congress is slowly but surely writing the word 'green' in green ink. Fu-

ture generations will give them a well deserved round of applause, but then again, they might instead joyfully raise their hands in the air and shake them.

-Michael Cohen, director of Audubon Society Expedition Institute

A 2nd LOOK AT THE 3rd NABC

The third North American Bioregional Congress convened August 21-26 in Ish River country, a vast watery bioregion on the sunset side of the Turtle, comprising large parts of what used to be called Washington state and British Columbia. It is a land of many rivers - Skokomish, Skykomish, Stillaguamish, Cheakamish, Chemainish, Nimpkish - Ish rivers all, and all flowing down to a great inland sea, summer home of the large Orca dynasties and the wild totem salmon who surge up the rivers in waves during the spawning season. Cedar and Doug-fir stretched their limbs over this strange confluence of humans arriving from all directions to share knowledge of their respective places - knowledge expressed in stories and songs, drumming and dances, and in wild improvisational theater. Knowledge embodied, as well, in diverse applications of scientific savvy on a scale appropriate to the intimate needs of particular places - including innovative methods of map-making, calendar making, habitat restoration, salmon reintroduction, permaculture, etc. Here, too, in this region sacred to the Lummi, Nootka, Kwakiutl, Salish, and other nations, indigenous spokespeople joined the congress for the duration, offering knowledge and advice from the land, trading ideas, and providing a link to ancestral methods of political process and decision making better matched to the mood of this continent than techniques imported from Europe. A Haida elder journeyed south from the "Queen Charlotte Islands" to address the congress, and a Swampy Cree singer from Manitoba shared visions and conducted sweatlodge ceremonies to cleanse participants of their overcivilized habits, freeing our wild mind for the careful work of the week. The ancestral chief of the Skokomish people offered knowledge of the native longhouse, built around five circles, in which we gathered each evening, as well as of the land on which the congress was held - a land now crossed by crackling power lines and stressed by the massive pulp-mill downriver (facts which at first frustrated many participants, arriving from more populous bioregions, who had hoped to find themselves lost in the wilderness).

The week was, in fact, a time of creative friction and the blending of alternate worlds: native modes of ceremony collided and then jived with wiccan and pagan ceremonial, while late each night, drummers and drums gathered around open fires in the longhouse and set the walls pulsing, blending Amerindian, Afro-Caribbean, and Latin American rhythms in magic, Earth-rumbling syncopation. Unable to resist, sleepers climbed out of sleeping bags and stumbled barefoot into the longhouse to join the dancing.

Bioregionalism is about slipping beneath the exclusively human logic that civilization continually imposes upon the land, in order to catch sight of another, older logic at work in the world, logic that includes the flight of crows and the tunneling of earthworms no less than the fumbling habits of humankind. It is about dropping underneath the nation-state structure - underneath the artificial boundaries on the map - in order to glimpse the actual boundaries already there in the land itself. The bioregional animal knows that sooner or later our political and economic social structures must begin to borrow their shape and character from the contours and textures of the land - the centralized human monoculture giving way to diverse vernacular cultures, themselves expressive of the wild diversity of Earth's ecosystems. This could only take place through a process which some call "rehabitation": through becoming a student of the actual place one inhabits, learning the character of its specific geology and soils, tasting the particular plants that grow in those soils and letting the smell of the local flowers influence one's thinking. Listening, too, to the various voices that haunt those plants and stones - voices of birds and mammals and insects (the local cricketsong beginning to

lend its pulse to the rhythm of our own speaking). Feeling the way the wind whispers through these particular trees. Tracing the sinuous signatures of the local snakes. "I've come here," said one participant at the congress, "to learn how to think like a place."

The congress was a time in which movement luminaries and activists gathered not, for once, to lead or instruct, but rather to just be themselves, and to dwell in community. But this was not, of course, a merely human community. Many who came from afar brought news of other species, and some came expressly as emissaries from these other intelligences, or rather as intermediaries between the human and non-human realms of intelligence. Numerous members of the "All Species Project," a theatrical conspiracy now infiltrating public schools in Santa Fe, New York City, Vancouver, Greenville (North Carolina) and elsewhere, arrived from these outposts to pool ideas to infect other bioregions with their contagious notions, and to enact spontaneous "happenings" complete with mad stilt-walking forest spirits, graceful flying cranes (with 30 foot wing-spans), massive lumbering buffalo, and other human-humbling apparitions.

The attentiveness to other species was particularly evident during the formal "congressing," toward the end of the week, when the whole group gathered to consider proposals regarding the strategy and future of the bioregional movement on Turtle Island (proposals prepared by various committees, such as those on "water and watersheds," "ecofeminism," "greening the cities," etc.) and to make decisions regarding these proposals by full consensus of the assembled participants. Throughout these long periods of decision making, four individuals represented the perspectives of non-human species - one for the four-legged and crawling beings, one for the winged species of the air, another for those who swim in the waters, and yet another for the myriad rooted beings of this continent. Several of these intermediaries had prepared for months beforehand - coming, through both study and empathy, to begin to identify with other species, at least to the point of being able to keep faith with these other modes of awareness while still listening (with one ear) to the seemingly abstract and often maddeningly indirect proposals of human bioregionalists.

Standing, or crouching, in each of the four directions, these individuals acted as potent witnesses, and sometimes spoke - or growled - when the needs of their fellow species were violated. At one strong moment, a woman speaking eloquently for octopus (and the other fluid beings) angrily interrupted a compromising proposal by the water committee, startling the assembled circle into momentary silence, and moving us all toward deeper mindfulness.

The gathering culminated with a rollicking masquerade dance, the "all species ball," under the full moon on the last night, to the pounding future-primitive rhythms of "Mama Coyote and the Boys" - an eight-piece band composed of eco-musicians and poets from the confluence of the Bridge and Yalakom Rivers in northern Ish nation. Bears danced with moths, river otters strutted with strange birds, and naked nature-sprites flirted with the trees. A few hours before dawn, the drumming moved off the stage and onto the field, and a full moon ritual began to circle, chanting. In quiet response, the moon slowly, silently slipped into partial eclipse... then gradually returned to its full glow.

Ultimately, a radical ecology - whether it calls itself "deep ecology" or "social ecology" - is about, literally, returning to our senses, and to the sensuous world that immediately surrounds us - a world all but hidden behind the abstractions and calculations of technological civilization. While Earth First! does the urgent work of resistance, tossing monkeywrenches into the gears of the industrial juggernaut, bioregionalists are beginning to work out, slowly and by an often bumbling process of trial and error, the ways we might begin to live once the megamachine grinds to a halt.

David Abram, a sleight-of-hand-magician, will begin in 1989 as an Instructor of Natural Philosophy at Pitzer College, in Claremont, CA.

Letters . . .

Continued from page 10

Of great importance in all these theories is the possibility that chemical-biological warfare (CBW) by the US is involved. In a separate article, Lederer traces the history of CBW, medical experiments, and population control, and makes it clear that CIA involvement is at least a good possibility (a thought echoed by former CIA agent John Stockwell). Without embracing one specific theory, Lederer points out that Western military, governmental, corporate, and medical institutions have played a major role in the origin and spread of AIDS. He states that "the AIDS epidemic has shown that western imperialism and western medicine, joined with age-old racism, sexism, and anti-gay oppression, make a deadly combination indeed."

The question for EF! is: where do we draw the line and who are our allies? Is reduction of human population by any means - Nazi death camps, smallpox-infected blankets, germ warfare, or politically caused mass starvation - something we want to embrace? EF! currently sells literature that states that Latin Americans are "culturally, morally, and genetically impoverished" (Edward Abbey, "Immigration and Liberal Taboos," *One Life at a Time, Please*), giving at least an element of truth to accusations of racism/fascism. It would be embarrassing, to say the least, to further such accusations by having praised AIDS should it later be proven to be just one more tool of US oppression. Putting our energy into environmental education, birth control, and equitable land distribution for all people and species might be a more positive approach.

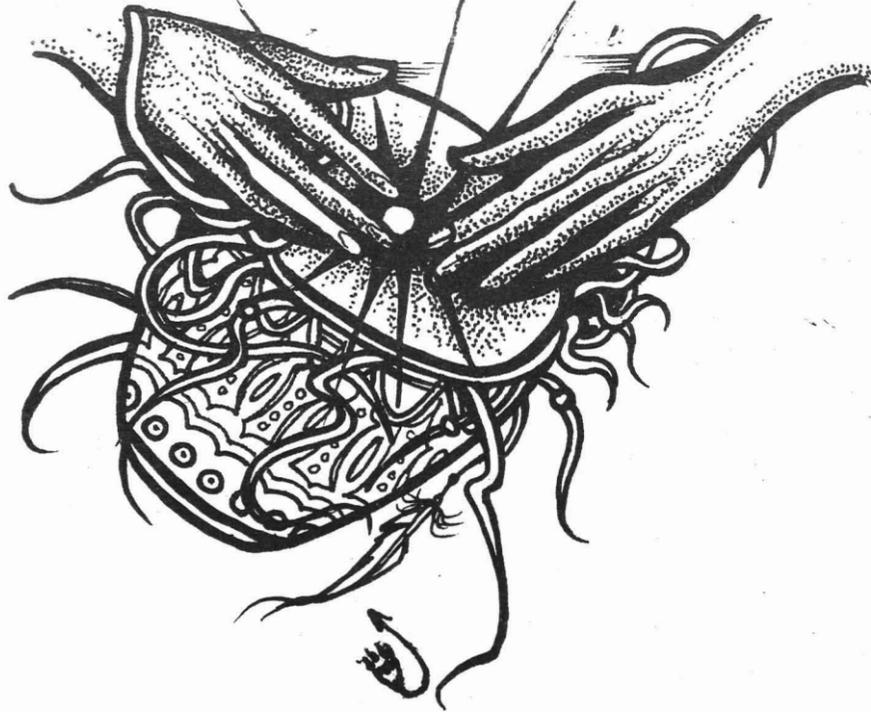
-Eric Holle, Colorado

Editor's note: Besides raising a good question, Eric brings up an important and unfortunate misconception that has brought EF! a lot of shit. In a variety of forums, Abbey has clearly stated that he's the victim of a typo. His manuscript described the current flood of immigrants from south of the border as generically impoverished people, a dispassionate but accurate term that suits the majority of U.S. immigrants from any part of the world.

Of course, some people will never believe anything Abbey says, and probably most folks would not accept him as their unqualified representative. The same goes for the Earth First! Journal. The Journal presents a diversity of opinions coming from many different voices, some quite provocative. It does not present anyone's adopted policies or approved platitudes; thumb through a copy of Sierra to see what that looks like. -Dale
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TRIBAL LORE



WOLF ACTION ALERT

BACKGROUND: Last January, a wave of protests from the United States and Canada brought international pressure on the British Columbia Ministry of Environment in opposition to the killing of wolves in the Muskwa Valley of northern BC. In February, as ecodefenders converged in the frozen North to oppose the kill, over 500 activists, including 200 Earth First!ers, stormed Canadian consulates, BC tourism offices, and the steps of the Parliament in Ottawa, to oppose BC's wolf killing policies. Upon being blocked by a court ruling from proceeding with the Muskwa kill, the Ministry vowed to resume the slaughter next winter.

PLANS FOR THIS WINTER: As planning by the Earth First! Wolf Action Network and Friends of the Wolf progresses, it looks the battle for British Columbia Gray Wolves this winter will occur on two fronts. Although the Ministry of Environment was legally blocked last winter from the Omineca Peace aerial kill in the Muskwa and Kechika Valleys, Environment Minister Strachan vowed to find a way to override the permit invalidation decision (see Eostar 88). In a recent conservation with Environment Ministry's carnivore coordinator, Wolf Action Network coordinator Tom Skeele was told that the legislation permitting the kill has been "tidied up," and that a new government technical report has again given ecological justification for the hunt. Thus it seems that the only stumbling block to this year's Muskwa hunt is public opinion. Wolf defenders will be prepared to intervene in this area. Activists will also be prepared to intervene in the Quesnel Highlands of central BC, where wolf killing is also scheduled.

Friends of the Wolf and the EF! Wolf Action Network are calling upon activists to join in a week of outrage, beginning January 9, against the BC wolf kill programs, and to hold public demonstrations and continue letter writing throughout the coming months. Appropriate targets are BC tourism offices, Canadian consulates, Air Canada travel outlets, and Canadian product importers such as beer distributors. EF! Wolf Action Network coordinator Tom Skeele will report on winter plans in our Yule issue (see also August 88 issue). Contact the Network (address in Directory) if you wish to join the team preparing to intervene in BC, or otherwise assist the effort. Meanwhile, wolf proponents should call the toll-free BC tourism number, 1-800-663-6000, and explain that you and your family and friends will boycott BC tourism until the wolf killing is stopped.

SUMMER 89 PLANS: In addition to its involvement this winter in wolf campaigns on mainland British Columbia, Friends of the Wolf is planning a campaign to begin next summer, on the northern rim of Vancouver Island, BC. Though we announced this campaign for last summer, only four persons responded to the call for renewed action, so it was necessary to delay the effort until 1989.

The facts are simple. Gray Wolves on the island are target of a year-round trapping program, because they are falsely blamed for declines in populations of

White-tailed Deer and Elk. The true cause of ungulate declines, is habitat destruction and poaching, which is rampant on Vancouver Island and elsewhere in BC. The Ministry employs wolf control because it is easier and cheaper to eliminate wolves than to eliminate poachers. The Ministry plans to aerielly drop poison 1080 baits if the trapping fails to achieve the quota of 80% elimination of wolves on the island. If 1080 is used, it will kill other predatory species such as Cougar and foxes and even small omnivores such as Raccoons. Therefore, monkeywrenching the traplines would only push the wolves, and other predators, out of the frying pan and into the fire.

One hope for the wolves remains: an assault against the poachers. Both trapping and poaching occur year-round on the island. We aim to enter the region next summer in the midst of a boycott campaign, and to draw attention to the poaching problem by confronting these killers.

Further announcements about the summer 89 campaign will be made after the winter campaigns. Cost will be \$200 per person to cover expenses. Contact Friends of the Wolf USNW, 3517 1/2 Fremont N #7, Seattle, WA 98103, if you wish to join or to donate equipment or for information. Or call 604-688-SEAL in BC.

TWO ALASKANS PROTEST WOLF HUNT

On September 26, Wolf Hunter Hunter and his companion, Coda, a 66% Timber Wolf hybrid, held a Howl of Protest on the Alcan Highway at the Canadian border, in support of the International Day of Howls Against the Killing. Tourists heading into Canada became aware of the plight of the Gray Wolves in Canada and the efforts of Earth First! to stop the killing.

Wolf Hunter Hunter and Coda drove from Valdez, the sphincter of the Trans-Alaska Pipeline, through Wrangell-St. Elias National Park to the Alcan on the eastern border of Alaska. South-central Alaska is one of the wildest areas of North America, but is threatened by new development courtesy of Alyeska Pipeline and the US Defense Department.

The morning of the 26th, the two friends moved through the spruce forests at the border into position to unfurl banners. Before the protest could begin, a US border patrol official pulled up and asked them to move to another location. "We don't allow signs on US government property." They moved the demonstration to the parking area.

Most surprising of those who stopped to chat were Jeff Turner and his wife Sue of British Columbia. They have been traveling throughout BC, Yukon Territory and Alaska filming wolves for a program on CBC called "The Nature of Things." They were documenting the wolf control efforts in these three areas and showing what wolves in the wild are really like. They had been unaware of EF!'s efforts to stop the carnage in BC, but after discussion with Hunter Hunter and Coda, they filmed the two on the protest line.

Jeff said there is a growing awareness of the killing in Canada and a growing protest from Canadian citizens. But he added that environmental groups from the US are the only active opposition to official BC policy. He was amply supplied

with information and addresses from Earth First! and the Wolf Action Network and returned to BC an EF! supporter.

The protesters left the Canadian border with a final howl, satisfied that a blow had been struck to protect Coda's sisters and brothers in the wild. They returned to Valdez to continue to fight the pipeline threatening to strangle the Alaskan wilderness.

EF! DECLARES NEW RANGE WAR

Most of the arid lowlands of the West are managed by the Bureau of Land Management, which controls over 340 million acres, and which is under the thumb of the livestock industry. Cattle and sheep have reduced biological diversity more than any other agent in the American West and (barring agriculture) in the world. They trample streams into mudholes, compact soils, and devour native vegetation. Almost all indigenous herbivores suffer as a result. And to prevent natural mechanisms from restoring the balance, ranchers wage war on all carnivores.

If we can get livestock off BLM land, as well as Forest Service and other public land, we will have set the stage for the recovery of vast wildernesses. With cattle and sheep off the public domain, soils and watercourses can begin to recover. Native grasses, forbs, and trees will follow. Elk, Bison, Bighorn Sheep, Desert Tortoise and Pronghorn populations will rebound in turn. And it is not unlikely that within five years of the end of public grazing, Jaguars will be reintroduced to the Southwest and Gray Wolves and Grizzly Bears to many Western states. Strong public support for predator reintroduction is currently thwarted by one tiny minority - public lands ranchers.

With that in mind and heart, Earth First! will kick off a new range war in 1989 - Earth First! against the welfare ranchers. Every January, ranchers from throughout the country show off their cows at the Denver Stock Show, billed as the largest display of cows in the world. This January, EF! will be there too, with a major action on the 14th. Activists from throughout Turtle Island are invited. Floor space is available for your stay [not at the show, of course].

We will use the stock show as a forum to inform the public about the devastation wrought by livestock. But that will only be the beginning. Everyone in the West can follow with actions against the BLM and FS. We'll make predator reintroduction an issue at the same time, to impress on the public how related the two issues are.

So far, Oklahoma Representative Mike Synar has been the most visible Congressional critic of public lands grazing, but he has only tried to eliminate the welfare aspect of it by raising grazing fees. We will pressure Western members of Con-

gress not indentured to livestock interests (there are a few) to introduce legislation freeing public land of private vermin. But while we want the force of law behind protection of the land, the legislative route will not, of course, supplant other efforts. It is rumored that here in Colorado, Arapaho and Cheyenne spirits wander at night, avenging the Buffalo and the extinct Plains Wolf with fence cutters and bows and arrows.

For information on joining the January action or to get a packet of materials for doing your own actions contact Colorado EF!, Box 1166, Boulder, CO 80306. For suggestions on night work, reread the anti-grazing chapter of *Ecodefense*.

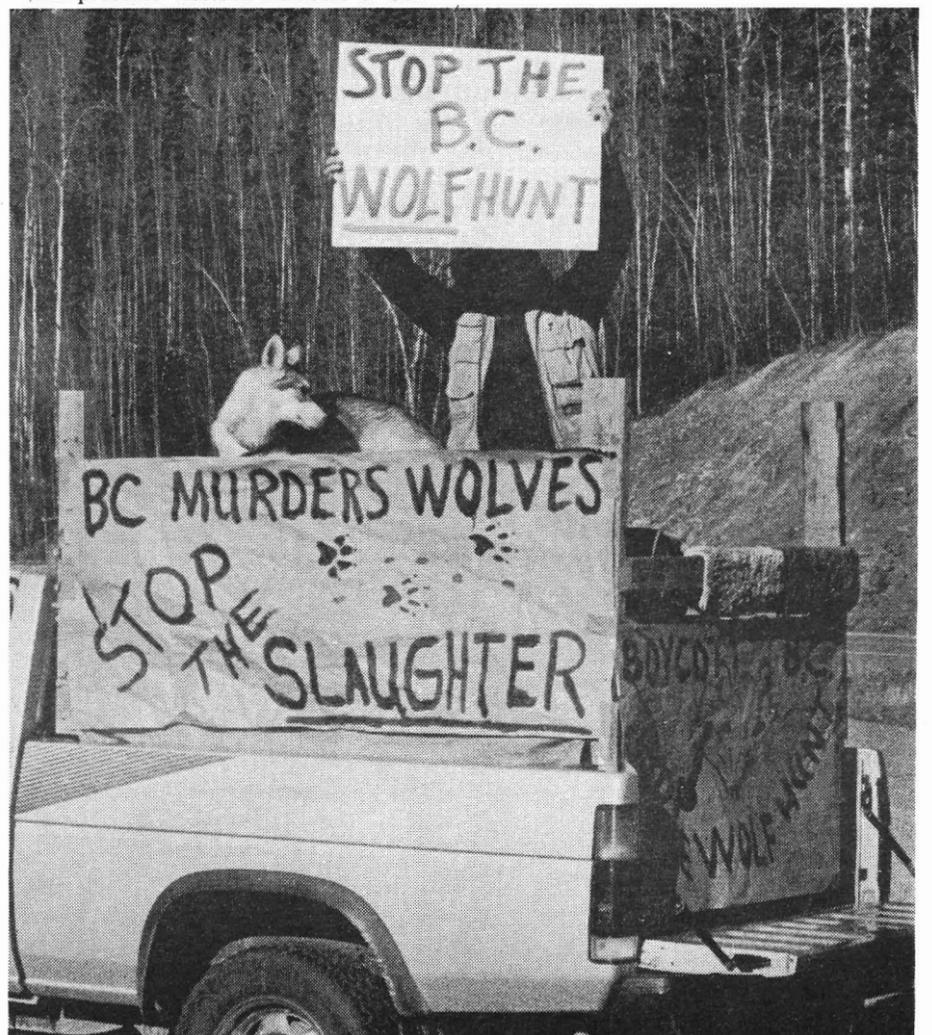
-Michael Robinson, Boulder, CO

SAPPHIRE SIX SUIT APPROACHES DECISION

As you may remember, six EF! protesters were sued last year by a logging company as a result of their action in the North Kalmiopsis area of Oregon's Siskiyou National Forest. Michele Miller, Karen Wood, Kamala Redd, Kelpie Wilson, James Jackson and Val Wade locked themselves to the yarder of Huffman & Wright logging company in the Sapphire timber sale. In addition to their sentences of 15-20 day jail terms, 10-15 day suspended jail terms, \$1800 in restitution, \$250-350 in fines and \$150-250 in suspended fines, the logging company brought a civil suit against the "Sapphire Six" for \$57,818, claiming damages due to trespass. \$50,000 was in "punitive" damages (to teach us a lesson, I suppose), and \$7818 was in "compensatory" damages, in addition to the \$1100 in restitution that had already been levied (the remaining \$700 restitution goes to Coos County for their "rescue team" that brought Val down from the yarder tower).

Over the past year, the case has been fought by David Atkin, David has been in the forefront of timber sale appeals here in Oregon, and is a co-initiator of the Siskiyou National Park proposal. He has based our defense on our freedoms to petition our government and of speech, arguing that our actions are not subject to a claim for punitive damages because they are constitutionally protected. He recently filed a motion arguing that their entire claim is invalid, since it is based on a claim of trespass, and we were on public land (National Forest). To date, David has filed 12 motions in the case, taken 15 depositions and argued 3 motions in front of the judge. The next big hearing is on October 21, and the trial is scheduled for November 1. We have filed a counterclaim against the company and some of the individual workers for assault, as rocks, hardhats, and rape threats were thrown at us, and one worker grabbed James and tried to haul him down off the yarder.

The case was initially moved out of Curry County to Douglas County because



One-person, one-wolf protest at the Canadian border.

Tribal Lore . . .

Continued from page 13

of prejudice. However, Douglas County Judge Kolberg has passed the case back to Curry County Judge Downer; the trial will still be in Douglas County and we will have a Douglas County jury. We speculate that the reason for this move is that the Douglas County judge does not want to face the political consequences of ruling against Huffman & Wright. Judge Kolberg had previously advised the attorney for Huffman & Wright that their case for punitive damages was very weak in light of the Oregon Constitution and case precedent. However, Huffman & Wright is a very big company in Douglas County and evidently was pressuring the judge, as shown by Kolberg's statements at a subsequent hearing, where he argued with David that, although non-violent civil disobedience would be protected from punitive damages, our actions seemed "pretty violent" to him, what with jumping up on that yarder and locking ourselves to it and all. So David thinks that the change of judge will be fine; Judge Downer won't have quite the political backlash from his ruling.

As you can see, this case has become complex. Both sides have moved for a summary judgment, which will be heard on October 21 in Gold Beach. David has fought long and hard, with little help. A University of Oregon law student, Becky Hiers, donated research time to the case (thanks, Becky!), but her studies have caught up with her. I have helped David as much as possible, but spent most of the summer doing media work for the Kalmiopsis campaign. An incredible amount of love and energy has gone into this case, and we hope to see it pay off in a decision that will prevent such a bullshit case from being brought against other CD activists.

Although David is charging us only for his expenses plus overhead (\$30 per hour), the bill has topped \$5000 already. The plea for funds in the Journal in March brought us \$150; thanks to all who donated! Chico EF! has donated T-shirts to Southern Willamette EF! to sell. I have put in a lot of hours at David's office on a work trade arrangement. All these efforts have helped, but we urgently need to get David more cash to help keep him in business! Although we are asking for attorney fees, there is no guarantee we will get them even if we win on the question of punitives, and David doesn't think that we will "prevail" (win more money from the jury than Huffman & Wright) on the compensatory claim v. our counterclaim. (In order to get attorney fees, you have to prevail in the case.) Civil suits such as this one have had a significant "chilling effect" on people here, keeping them from actively protesting old growth destruction. We need to fight this case to stop this trend.

Please send what you can to: Sapphire Six Legal Fund, c/o Southern Willamette EF!, POB 3499, Eugene, OR 97403. Make checks out to Earth First!, or, for a tax deduction, to Friends of Cathedral Forest (earmarked "Litigation Fund"). For more information, write to me at that address, or call me at 503-726-4738.

-Karen Wood

URANIUM MINING UPDATE

Uranium mining in the Grand Canyon watershed continues to spread insidiously. New mines are under construction on the North Rim. The Hermit is well under way, as is a mine at a site called Arizona North. The North Rim also faces possible mills. What makes the problem difficult for activists to combat is the North Rim's remoteness. At present, there are no activists, to my knowledge, spending time on the North Rim.

On the South Rim, Energy Fuels Nuclear's Canyon Mine is near completion, with only the shaft itself yet to be finished. The facility includes spotlights every 100 yards around the mine fence, facing outward. The Havasupi continue their lawsuit to stop the mine, but their appeal to the Freddies was denied. The Havasupi have been under pressure from military-like activity by the Feds as well as bribes from EFN designed to turn the youth of the tribe away from their traditions. Native Americans held a conference near the Canyon Mine site in September. This may signal a beginning of unified tribal opposition to the mines. Nonetheless, the Canyon needs the efforts of EF! activists more than ever.

-Roger Featherstone

RUSSELL WINS UNITED STATES OF AMERICA vs GEORGE H RUSSELL

A ruling from United States District Judge Lynn N. Hughes on Criminal Case N. 87-267, UNITED STATES OF AMERICA vs GEORGE H. RUSSELL will have far reaching effects in helping to protect citizens from assault and false arrest for exercising their Constitutional rights.

On August 30, 1987, George Russell, Lone Star Chapter Sierra Club Forest Practices Chair, was assaulted and arrested by US Forest Service law enforcement personnel for talking to the media and handing out press releases exposing the truth about the napalming of the Four Notch proposed Wilderness Area in Sam Houston National Forest near Huntsville, Texas. The assailant, Billy Ball, a Forest Service special agent, had acted in a violent manner toward Russell in the past. Ball had a history of abusive behavior including causing permanent injury to James Jackson of Texas Earth First! by ordering him to be chopped out of a tree in which he was resting during an action to stop the destruction of Four Notch. As Russell was concerned for his personal safety and Ball carried a loaded .357, he was careful to comply with the law.

Russell had been a constant thorn in the side of the Forest Service for over a decade, exposing FS dirty tricks and outlaw activities which included systematic destruction of habitat of the Red-cockaded Woodpecker (an Endangered Species), the crushing of one of North America's richest old hardwood/pine forests, eradication of champion trees and rare plant communities, and finally the plan to napalm 2600 acres of forest in the biological crossroads of North America.

As Russell knew he was not guilty of the charge of "Interfering with a Roadway," he was confident that his court ap-

pearance before Hon. H. Lingo Platter, US Magistrate, would only be an inconvenience. Little did he know that Billy Ball would lie to the judge and that the evidence conclusively proving Russell's innocence, a FS videotape, would be withheld for over seven months. Platter's verdict of "guilty" shocked Russell and his attorney Dale Duff, but they vowed to fight to the bitter end - even to the Supreme Court if necessary.

Ironically, it was US District Judge Lynn Hughes who was selected to hear the appeal. Hughes was the judge who, the year before, ruled against the Texas Attorney General and allowed the FS to proceed with the crushing and napalming of the Four Notch proposed Wilderness. This legal setback, like so many others, had been due to the toothless nature of the laws allegedly designed to protect our public lands from wholesale clearcutting and other irresponsible forest practices - not because of any judicial bias. Russell was in fact happy that Hughes was selected to hear the case as Hughes had a reputation for being a defender of the Constitution and a man of intellect.

Regarding his case, Russell stated: "Anytime, anywhere a citizen is harassed, threatened, intimidated, arrested or suffers other abuse at the hands of the Forest Service, a Federal Agency gone berserk, that citizen has an obligation to expose those abuses. It is the FS which is operating as an outlaw at the expense of the taxpayer and the future of our natural heritage.

"Had the FS succeeded in their plot to have me convicted for a crime I didn't commit, then I feel certain that they would have immediately launched a nationwide campaign of silencing, through false arrest, hundreds of citizens engaged in the fight to reform the Forest Service."

Endangered Woodpecker Wins Some Protection

The Red-Cockaded Woodpecker of eastern Texas recently won some protection from Forest Service abuses in a US District Court decision. Judge Robert Parker issued a permanent injunction banning clearcutting and even-aged management within 3/4 mile of colonies of the Endangered birds in the four National Forests in Texas. The ban covers about 200,000 acres, or about a third of the affected forests.

Local redneck loggers and logging-lovers reacted strongly to the decision, as shown by a statement of state Representative Jim Chapman: "The real argument is not over the woodpecker, but is basically environmentalists disagreeing with clearcutting. We're talking about 500 woodpeckers. They're ugly, they don't have a particularly melodious song, and they perform no useful service to either nature or man. Humankind and the biological order can get along just fine without this bird, but Parker has to under the law protect the little buggers."

EF! Warns Midwest Clearcutters

The East Perry Lumber Co. of Missouri recently received a message, formed of letters clipped from newspaper headlines, saying "Stay out of Cave Valley" and signed "Earth First!" The company holds a contract to clearcut about 100 acres of the southern Illinois Valley, an area long-recognized as a unique ecosystem.

Cave Valley holds the last known breeding area in Illinois for the Swainson's Warbler, a state-listed endangered species. It also harbors the federally Endangered Indiana Bat and several other Threatened or Endangered Species. When local environmentalists complained about logging plans, the Forest Service delayed timber operations while doing an Environmental Assessment. Other concerns raised by "respectable" environmentalists include the poor regeneration of old clearcuts in the area and the costs for Forest Service road and bridge construction, totalling over \$100,000, to serve a timber sale that will cost the logging company only \$63,000.

A sensitive local logger was quoted as saying, "Trees are just like corn and beans... When they get mature, it's time for them to come out."

Wobblers Fight for the Environment

The Industrial Workers of the World (IWW) has taken a very visible role lately in environmental politics, dealing with both Greenpeace and Earth First! As re-

ported in the September issue of *Industrial Worker*, IWW organizers pulled together Greenpeace phone bank workers in Seattle upset by changes in their working conditions. Forced to use high-pressure telemarketing techniques and monitored by electronic surveillance, the workers started an IWW union organizing drive. Greenpeace responded by closing the phone bank and moving its operations to Boston.

The *Industrial Worker* has also given extensive coverage to Earth First!, devoting their May issue to "Radical Environmentalism" and the connections between IWW and EF! (The IWW is, in many ways, the philosophical parent of EF!, and is the direct source for many of our tactics.) In the September issue, they take on the various rumor campaigns against EF!, those coming from both Left and Right, and give the best summary so far of the issue.

Subscriptions to the monthly *Industrial Worker* cost \$4 per year, and are available from the IWW, 3435 N. Sheffield, Chicago, IL 60657.

Destruction Begins for Laurel Creek Resort

Work began in October for the 5,000 acre mega-resort at Laurel Creek, West Virginia (see "Heads Up..." in last issue). This fall's destruction will take the form of a golf course, with work on the huge ski area and other facilities to begin next spring. Becon Construction Co., a subsidiary of Bechtel, is doing the building.

Several hundred acres needed for the development are owned by the Forest Service. Laurel Creek Development Corp. has discussed a land exchange with the FS, but has not yet made its formal proposal to the agency.

FIRST EASTERN BIG WILDERNESS CONFERENCE

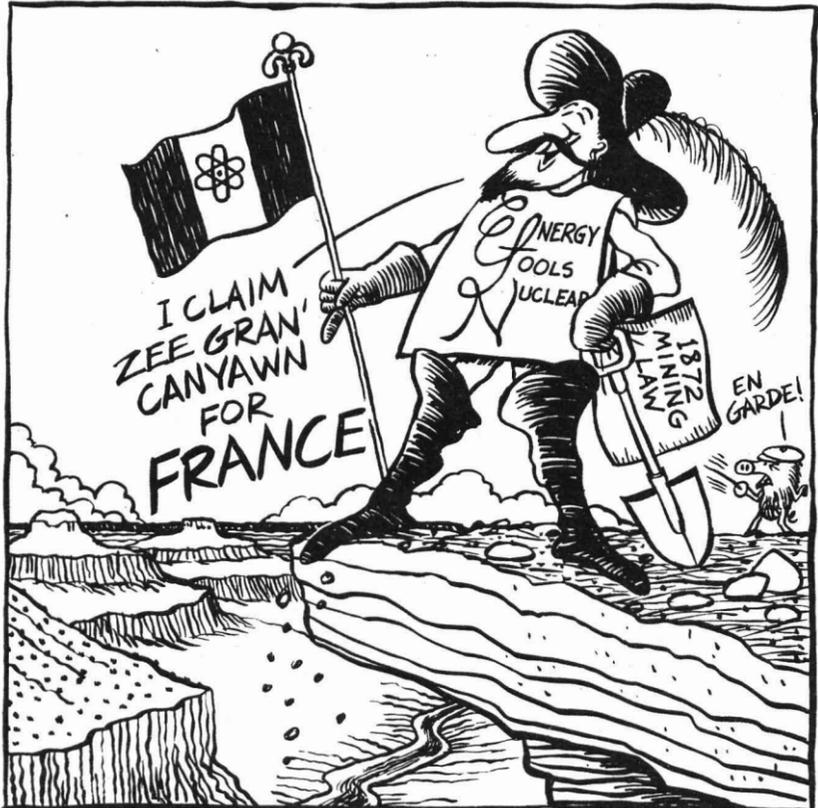
On September 17 and 18, over 100 activists and observers from up and down the eastern bioregions gathered for an Earth First! style wilderness conference. Taking place at James Madison University in Harrisonburg, Virginia, and sponsored by Virginians for Wilderness and *Katuah*, the conference featured philosophical, scientific and poetic perspectives on wilderness with a deep ecology theme.

The program started with moving readings by poet Gary Lawless of Maine Earth First!, and an evocation of the wilderness spirits by David Wheeler of *Katuah* journal. They were followed by Jamie Sayen of PAW (Preserve Appalachian Wilderness) who called for the return of big wilderness along the Appalachian chain, as well as the rescue of millions of acres of private wildlands in northern New England. Then David Wheeler and Gary Lawless returned to call upon us to reconnect our spiritual relations with the land and its totem spirits - animals, plants, rocks and waters.

Reed Noss initiated afternoon discussion with his talk on the ecological basis for wilderness protection and restoration. Saturday's session ended with a stirring talk by Dave Foreman on the need to recapture wilderness "green fire" in the East.

Sunday's session started with Barbara Dugelby riveting the audience with her box of tricks to save endangered species. This was amplified by Jasper Carlton of the EF! Biodiversity Project. Virginia EF!er Brenda Vest then gave us a neat example of grassroots success, describing efforts to save a rare wetland on Mill Mountain in the George Washington National Forest of Virginia from clearcutting. Brenda had the attending Freddies squirming! After Brenda's workshop, this correspondent explained the need for integrated ecological preserves in the Central Appalachians similar to those proposed by Reed in past issues of *EF!* for Ohio and Florida. This theme was also taken up by Bob Zahner of Clemson University's Forestry Department. Professor Zahner also promoted the idea of a coalition of citizen groups to save biodiversity in the Southern Appalachians from the Freddies. (Too bad more foresters don't attend Clemson.)

Sunday afternoon included a talk by long time wilderness activist Ernie Dickerman and a diatribe in which Jasper delivered sledge hammer blows to "Homo shiticus" type federal ecosystem mismanagers. We also found time for a slide show on the Montana, Idaho National Interest Land Preservation Act proposed by our western friends, as well as an expose



by Sea Shepherd activist Ben White of tuna industry dolphin slaughter. Dave Foreman then closed the conference with a call for EF!ers and like-minded activists to amplify the ecological preserve concept with a new book in mind: a book presenting EF! Wilderness proposals for all this country's bioregions.

This conference could not have taken place except for the assistance of the Earth First! Foundation. Special credit is also due to EF!er Jen Thomas who helped organize the conference; also my wife Betty for many assists. Finally we appreciate the efficiency of the JMU Special Events Office.

Hopefully there will be other big wilderness gatherings in the East's future, resulting in eventual establishment of wilderness preserves second to none.

-Bob Mueller

Association president even invited Earth Island's Carrie Stewart back to be interviewed for the national Restaurant magazine! Both Santa Cruz EF! and Davis EF! have met with some success in making their towns tuna-free zones. Several folks are working on tuna-free zones at their campuses.

WHAT YOU CAN DO: Boycott tuna-killing companies! Activists are needed everywhere, especially in the belly of the corporate beasts in Pittsburgh, St. Louis, Minneapolis, San Francisco and San Diego, to protest dolphin killing and to promote the boycott. Call 213-590-7900 collect to ask Starkist why they are killing dolphins. Call CHICO SAN Co. toll free at 800-325-4566, and tell them they are on the boycott list until their parent company stops the killing. Heinz products to boycott include: Star-

vice, in the land of the world's largest living things.

Beyond the Park boundary the road becomes rough, crumbled pavement marking the passage of logging trucks that cross the Park's roads from the surrounding National Forest lands. In contrast, a few miles farther along, after the road reenters the Sequoia National Forest, it is smooth and well maintained again.

The Sierra Nevada well south of Yosemite is a patchwork of Forest Service and National Park Service lands that graphically reflect a history of political rivalry and ambivalence between the two agencies dating back the late 1800s. In 1890, Congress designated one township of land surrounding the General Grant Tree grove as a National Park. At about the same time, a similarly small piece of land surrounding the Giant Forest became the seed of Sequoia National Park. Since that time, both Kings Canyon and Sequoia National Parks have grown incrementally and have been joined geographically and administratively. Together, Sequoia and Kings Canyon Parks (SEKI) consist of more than 500,000 acres, mostly high altitude wilderness.

Unfortunately, while the Park boundaries include almost all of the high elevation land east of the Grant Grove and Giant Forest areas, the middle elevations of the Sierra in and around Sequoia and Kings Canyon are a jurisdictional patchwork that favors the Forest Service.

The mixing of FS and NPS lands confuses the more than 2 million people that visit these National Parks each year and makes law enforcement, land management, and public education difficult for the NPS. Park rangers constantly must explain to visitors the differences between the Forest and Park Services. Every logging truck that passes through NPS lands, pulverizing the aging Park roads, causes waves of questions about the mission of the NPS, since visitors assume the trucks come from deeper within the Parks. And while no hunting or off-road vehicle driving is allowed in the Parks, such "uses" are allowed on the large islands of FS land that divide the middle elevations of Sequoia and Kings Canyon and divide the lower sections of Kings Canyon NP.

Not only are visitors confused by the jumbled political borders between the Parks and Forest, but animals such as Black Bears and Mountain Lions, which the NPS spends millions of dollars to protect each year, are poached or hunted when they cross the arbitrary boundaries. In SEKI, professional and volunteer bear management experts work to keep the bears out of the campgrounds and in the wilds. Millions of dollars have been spent on bear-proofing trash cans, informing campers of the danger to bears caused by human foods, and dealing humanely with the bears that do become "campground bears." Yet a few miles from the heart of SEKI, the Forest Service campgrounds have open trash pits and no program for dealing with bears that stray there from the Parks. In the FS's Stoney Creek Campground, bears eat garbage nightly and are routinely shot by the FS or the public when they become a nuisance. Often they are the same bears that have been the focus of expensive preservation efforts by the Park Service.

While the National Park Service has been working to restore forest fire to its original place in the Sierran ecosystem, the Forest Service fights fire with a vengeance unless it starts within a FS Wilderness Area. The NPS's underdog status shows when it must go against its own let-burn fire policy. The FS makes the NPS extinguish any fire that would cross the Park boundary. From a political point of view, protecting deficit timber sales on FS lands is more important than ecosystem preservation and restoration that the NPS may seek to facilitate.

Likewise, when an epidemic of dwarf mistletoe swept the Kings Canyon Park bottomlands, the FS demanded that the NPS take steps to control the disease in the Cedar Grove area of the Park. In violation of NPS bylaws, NPS foresters trimmed and felled thousands of Ponderosa Pines in order to assuage the economic concerns of the FS.

Perhaps because the US Forest Service carries a disproportionate amount of political power over the National Park Service, the NPS pays many of the bills for the FS. NPS roads that have been ruined by logging trucks from FS lands must be repaired with meager NPS funds. Accidents and crimes that occur on FS lands near

the Parks are usually dealt with by Park Service rescuers and rangers.

Recently, the Sequoia National Forest gained national attention when they began timber cutting among the Giant Sequoia stands near the boundaries of the Parks. Traditionally the FS had let be the areas near the Congressionally protected giants. But then the FS argued that clearing all the trees except for the giants would open the ground to new Sequoia seedlings. The Sierra Club Legal Defense Fund successfully sued to stop the logging, charging that heavy equipment and tree felling would probably kill the giants' shallow and delicate roots. Clearly the health of the economically useless Giant Sequoias is of no concern to the timber hungry Forest Service.

The problems between Sequoia and Kings Canyon National Parks and the surrounding Sequoia National Forest are typical of the friction between these agencies nationally. Near the Park Service's Bandelier National Monument in northern New Mexico, the FS has shown open contempt for the NPS in their efforts to preserve the greater Bandelier ecosystem. Clashes between the two agencies are better known in places like Yellowstone and Glacier National Parks and their surrounding National Forests. When the cards are down, the Forest Service holds far more political clout than the Park Service.

Yet at the same time, the FS has grown increasingly distressed by a rising chorus of demands that the Parks be expanded and the National Forests be diminished to protect the last vestiges of wilderness in the West. The NPS consistently rates as the most publicly favored of the federal land management agencies. Yet such popular favor does not translate into political power or adequate appropriations.

Sequoia and Kings Canyon Parks and many others nationwide should have their boundaries revised to include whole ecosystems and adequate buffer zones. The needed land must come from the National Forests. Likewise, the Park Service should be granted political clout and increased funding to reflect the importance of its mission and its growing popularity. With the changing of the guard in the White House, environmentalists should press for these changes as a high priority early in the next administration.

-Tom Ribe

ed. note: Bills which might accomplish some of these ends were introduced into Congress in 1988 and will likely be reintroduced in 89. Readers may wish to write their senators (US Senate, Washington, DC 20510) and representative (House of Representatives, DC 20515) in support of legislation to drastically increase the Land and Water Conservation Fund (sponsored in the House by Mo Udall) and to free the National Park Service from direct control by the Department of Interior (sponsored in the House by Bruce Vento). It would also be worthwhile to write the new President (White House, DC 20500) in support of such legislation, and urging him to pressure the Park Service to preserve its wild lands so that it will deserve the public favor it has won. (See Michael Frome's statement in this issue regarding the failure of all federal land management agencies, including the NPS, to protect wilderness.)

FROME CALLS FOR WILDERNESS SERVICE

The following is a condensed version of the statement of Michael Frome at an Oversight Hearing on management of National Forest Wilderness, House of Representatives, Washington, DC, July 26, 1988:

I believe I have been to as many Wilderness Areas in this country as anyone, but I have not seen a single one managed as it should be, in fulfillment of the spirit or the letter of the Wilderness Act of 1964. I have seen wilderness degraded by uncontrolled and inappropriate uses, getting worse rather than better, staffed by inadequate personnel insufficiently trained.

In some ways the Forest Service does the best job of the four federal bureaus charged with protecting the landed heritage of the American people set aside by Congress in the National Wilderness Preservation System. The National Park Service, Fish and Wildlife Service and Bureau of Land Management all have good people in their ranks, but they lack institutional aptitude and commitment to wilderness management, or to the wilderness princi-



Protesters hoist banner outside Heinz' Annual Stockholders Meeting.

PROTESTERS TAKE TUNA BOYCOTT TO HEINZ STOCKHOLDERS

In early October, 50 demonstrators from Earth Island, Earth First!, and Pennsylvania's Mobilization for Animals descended on HJ Heinz annual stockholders meeting and demanded Heinz stop buying tuna caught by killing dolphins. Heinz sells its tuna products under the Starkist and Breast O'Chicken labels, and markets tuna flavored cat foods such as 9-Lives and Amore.

At a press conference inside the Vista International Hotel in Pittsburgh, the site of the meeting, Carrie Stewart, of Earth Island Institute's Dolphin Project, charged that Heinz, the largest tuna processor in the world, buys tuna from fishing vessels that catch tuna using the controversial technique known as "setting on dolphins" - a procedure that results in the slaughter of more than 100,000 dolphins each year. "And all the killing is to catch 5% of the worldwide supply of tuna," Stewart stated.

Despite reports of Heinz's increased stockholder dividends and \$5.2 billion in annual sales, Heinz Chairman and CEO, Anthony O'Reilly, contended that he could not stop purchasing the tainted tuna because it would just be sold to someone else. He said that the increased profits from netting the larger, more easily located tuna often associated with schools of dolphins are the reason for the continuing slaughter.

Earth First!ers Lee Dessaux and Todd Patterson climbed to the top of two 60-foot flagpoles outside the hotel, while protesters marched below - some dressed as giant tuna cans and Heinz ketchup bottles. Police had to call in a fire department hook-and-ladder to get the two activists down. The entire event was widely covered by the media, including all three Pittsburgh TV stations, the daily *Pittsburgh Post Gazette* and *Pittsburgh Press*, and AP and UPI newswires.

The protest came days before the US House and Senate were to vote on the reauthorization of the Marine Mammal Protection Act, the law that is supposed to protect the dolphins, but has been decimated during the Reagan-Bush terms.

On other fronts, Earth First! and Earth Island co-sponsored an informational picket line and guerrilla theatre at the Restaurant Association annual convention in San Francisco. A talking bottle of Heinz ketchup and a can of Starkist tuna handed out leaflets at the Heinz table until Heinz personnel realized their message was bad for business. Restaurateurs were amused and eagerly took leaflets. The Restaurant

kist and Breast O'Chicken Tuna, 9-Lives, Amore, Recipe and Glamour Puss Pet Foods, Chico San Rice Cakes, Heinz Ketchup, Weight Watchers. For a free dolphin organizing kit, contact Earth Island Dolphin Project, 300 Broadway, Suite 28, San Francisco, CA 94133. Direct action contributions for the EF! dolphin action team can be mailed to Earth First! Direct Action Fund, Box 83, Canyon, CA 94516.

-Todd Steiner, director, Earth Island Dolphin Project

Park Service Kills "Problem Bears"

Nine Black Bears were killed this summer in Sierra Nevada National Parks, seven in Yosemite NP and two in Sequoia NP. The bears were apparently driven by hunger down into human settlements, during this second successive year of drought.

In a Yosemite Valley campground, several cars were torn apart in one evening by hungry bears. In Sequoia National Park, one bear was killed after it crashed through the window of a guest cottage and took the pizza a visiting family was about to eat (ah, pizza in the wilderness!). (*San Francisco Sunday Examiner & Chronicle*)

FS THWARTS NPS IN SIERRA

In the sultry summer heat of California's Central Valley, one can easily overlook one of the world's great mountain ranges looming to the east. In the frantic traffic of Fresno and Visalia the world is flat and life is composed of stoplights, unbearable heat, and sales at the Fashion Fair Mall. The craggy peaks of the Sierra Nevada remain hidden beyond an ever thickening brown-yellow pall of California smog.

But take highway 180 to the east, through the developer bulldozed orchards and past the pesticide soaked cotton fields and soon the road veers among the Sierran foothills. A little farther, beyond the drought tortured lowland oaks, a sign welcomes you to the Sequoia National Forest, a presage of mountains ahead.

The road winds higher through countless chaparral choked drainages until the first Ponderosa Pines and Incense Cedars stand on the sun cooked ridges. But after about 15 miles, when the forest becomes thick along the roadsides, a sign warns that you are leaving the Sequoia National Forest. A National Park Service entrance station squats below a Giant Sequoia: Kings Canyon National Park, an island in the Sierran empire of the US Forest Ser-

Tribal Lore . . .

Continued from page 15
ple, for that matter.

The National Park Service, for example, in a Wilderness Task Force Report of May 28, 1985, conceded as follows: "Management of individual wilderness areas of the National Park System is not carried out on a systematic, consistent basis Servicewide. This lack of consistency is true for designated, potential, proposed and defacto wilderness areas."

All of the bureaus, to be sure, will offer policy statements, plans and promises proclaiming the future of wilderness management, but they all represent bureaucrat paperwork, otherwise known as lip service.

If the bureaus truly desire to meet their assigned mandate, they must do considerable soul searching, examining internal attitudes and practices. The administrators of Olympic National Park, for example, two years ago found it convenient to construct a power line through a wilderness study area, with knowledge and approval of the Regional Office. In the same period, research and administrative officials of Sequoia-Kings Canyon National Park sought to use helicopters for acid rain studies - while at the same time the Forest Service was resisting pressure from EPA to do likewise. In a letter to me, the superintendent of Sequoia-Kings Canyon defended the helicopter scheme with the fatuous statement: "We violate wilderness to protect wilderness."

The American people want wilderness and they want the National Wilderness Preservation System run by competent, caring federal personnel. But there are not enough individuals in the agencies, and certainly not in positions of authority, who recognize the values of the wilderness heritage in their trust or who have been properly trained to manage wilderness as a natural resource. Most agency personnel in decision-making "line" positions come from natural resource colleges and universities schooled in commodity production; they look on the earth as raw material that must be consumed in order to be useful.

Until now we've been talking about patching a leaky tire when we need a new one. Approaching the 25th anniversary of the Wilderness Act, the time is at hand to honor its mission by considering the establishment of a federal agency to be known as the United States Wilderness Service. Since we pay people in government to serve mining, grazing, logging and other resource-consumptive interests, why not underwrite a corps of men and women who will prove government responsive to the people's wilderness cause?

The Wilderness Service would undertake many missions now unmet. For example, it would publish a periodic inventory of wilderness now reserved and survey opportunities to protect additional units by all levels of government. It would, in fact, be responsible for a coordinated approach beyond the scope of federal land. It would delineate the diverse values of specific ecological types, show how they can be saved, and report on threats to them. No bureau does these things today.

The Wilderness Act furnished the technique for preservation of large tracts of federal lands. Some states have developed their own initiatives from that foundation. Now there is need to identify and provide statutory protection for smaller tracts in urban areas still in a relatively untouched state.

The Wilderness Service would be deeply involved in research covering the broadest fields of utilization, human impact, ecology, economics, plus history, archaeology, anthropology, and art. Federal land management agencies have conducted small studies, but their approaches are too narrow and efforts of their wilderness-oriented personnel are circumscribed. The Wilderness Service would not administer land, but would furnish new ideas for better land administration. It would help to determine how much human use an area can absorb without impairing its values, hopefully reversing the trend of deterioration.

Still, determining carrying capacity may be the simplest aspect of use. How to utilize wilderness as an educational and inspirational resource so that oncoming generations appreciate and respect the natural world is the fundamental challenge for the Wilderness Service, and for the rest of us as well.

-Michael Frome, environmental journalist, author of *Battle for the Wilderness*
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Evidence of Robert Redford's environmental sensitivity.

THE REDFORD THEATER PLAYS ENVIRONMENTAL TRAGEDIES

An actor, Robert Redford is; an environmentalist, he is not. It is natural, though, for an actor to play a role, say as an environmentalist, while embodying a completely different person in real life, like a developer. But for the wildlife and humans in the path of his Sundance, Redford's theater is a tragedy.

Since 1969, Redford has been developing Sundance, a 4000 acre resort located 15 miles northeast of Provo, Utah, bordering US Forest Service land and situated in a Critical Environmental Zone (CE-2) in the Wasatch Mountains.

Redford's development started with stables, a mountain restaurant and a lodge, and is presently proceeding with a five phase scheme. It involves a rehearsal hall, conference center, store, parking lot, ski lifts, 160 condominium units, and redirection of a river.

Redford's public efforts on behalf of the environment do not offset the harms he is causing with his resort. For instance, when Redford was named the National Wildlife Week Chairman in 1977 because of his work promoting clean water, the Utah County Health Department and cabin owners near Sundance were worried about him polluting the North Fork of the Provo River with horse manure from his stables.

Redford's interest in alternative energy will hardly counteract the negative impact of the high intensity electric lights glowing all night in his parking lots. Nor will it make up for the negative impact of the energy consumption he is encouraging by inviting the jet-set gentry to buy condos at his resort.

The environmental impact statements he has submitted as a prerequisite for approval of his Sundance development plans are disgraceful. No mention is made of any affected wildlife species, as is required by the Utah County Zoning Ordinance. The second of two EISs was submitted in 1985. It is a scanty eight-page document written by the civil engineering firm which designed the Sundance development plans.

Sundance is within a lower montane, riparian habitat bordering a US Forest Service Scenic Area. The area's rich flora and fauna are imperiled by the resort, yet the Forest Service seems to be on good terms with Redford. They traded 225 acres of land with him in 1984 to enable him to expand his ski resort.

Perhaps playing a role as an outlaw like the Sundance Kid is closer to Redford's true character than is the role of an environmentalist. He has not scrupulously complied with the Utah County Zoning Ordinance, but the Utah County Planning Commission does not appear to have any scruples about that. Starting in 1969, Utah County gave Redford permission to build a lodge and restaurant without first having an approved plan for his resort as specified in the Zoning Ordinance.

In 1975, the County Planning Commission finally warned Redford that no more building permits would be issued to him without an approved plan for his resort. Nevertheless, between 1975 and 1979, when Redford finally completed a plan, he obtained permits for a parking lot, ski lodge and ski shop. He also bulldozed a two acre meadow for a car lot.

When he is in a situation where his development plans do not comply with the Zoning Ordinance, he tries to amend the Ordinance to meet his ends. He has altered the Ordinance to allow roads with

steeper grades. He has amended the Ordinance to have a Critical Environmental Zone 1 area permitted in a recreational resort, in accordance with his desire to expand.

Redford's "environmentalism" is an image kept alive by fantasies that he is the Sundance Kid, or Jeremiah Johnson. People want to believe that we still have a wild West and that Robert Redford is out there taking care of it.

One day, though, when the planet is all scarred, when all the Coyotes and Bobcats are pacing at the zoo and the only way to see Nature is on old TV reruns featuring Robert Redford, I think I'll retch.

WHAT YOU CAN DO:

1) Crushed, former Redford fans and others should send letters to him at RR 3, POB A1, Provo, UT 84604. Tell him that you'll boycott his films until he changes his bulldozing ways. 2) Write to the Sierra Club, 730 Polk St, San Francisco, CA 94109. Tell them that they will disgrace John Muir if they use Redford in any upcoming nature films. 3) Write to Malcolm H Beck, Chairman of the Utah County Planning Commission, 100 E Center St, Rm 2300, Provo, UT 84601. Insist that preferential treatment to Redford end and that he be made to adhere strictly to the Utah County Zoning Ordinance. 4) Rowdy Salt Lake area readers are needed for creative displays of disgust. Contact E. Kemp, 5337 College Ave, #428, Oakland, CA 94618.

-Elizabeth Kemp

Burr Trail EIS Battle Begins

After two years of heated litigation, the fight against the paving of Utah's Burr Trail has returned to the public arena. As a consequence of the legal battle, the public has been guaranteed the right to have a say in management of the Burr Trail and the surrounding public lands. By the time you read this, the BLM should have published a draft Environmental Assessment on plans for this wholly unnecessary road through some of the country's most outstanding desert wilderness.

To support the 16 million acre Earth First! Utah Wilderness Proposal (Bel-tane 1986), EF!ers should send for the draft and tell BLM to CLOSE THE ROAD and to protect the wilderness that surrounds it. Write: Dave Everett, Bureau of Land Management, POB 729, Cedar City, UT 84720.

WRITE FOR THE CALIFORNIA DESERT

Senator Alan Cranston's bill to protect significant portions of the California Desert Conservation Area died in the 100th Congress, but Cranston will probably introduce it early next session. At that time, it will be important to write Congresspersons in support of the 17 million acre Earth First! wilderness proposal for the California desert, a proposal which shows Cranston's bill to be moderate and compromising.

Meanwhile, the California Desert Protection League (c/o Sierra Club, 264 E Green St, Claremont, CA 91711) is urging activists to write to the BLM on behalf of Afton Canyon. The following is from CDPL's alert:

The Barstow office of the BLM is proposing a new Afton Canyon Management Plan that will eliminate all motorcycle and ATV play areas, and existing ORV routes from the canyon and surrounding areas. Afton Canyon is off I-15, between Barstow and Baker. The Old Mojave Road will be re-routed out of riparian areas and left open to licensed 4WD vehicles only. Graz-

ing will be eliminated in the heart of the canyon. Exotic plants will be removed and native vegetation restored. . . . ORV's will fight this plan bitterly! Please write immediately in support of the plan to: Bureau of Land Management, Attn: Harold Johnson, 150 Coolwater Lane, Barstow, CA 92311.

FS RELEASES MBNFSADCMP/EIS!

The Mono Basin National Forest Scenic Area Draft Comprehensive Management Plan/Environmental Impact Statement is finally out. The plan is the result of the 1984 legislation that created the 57,000 acre Scenic Area, as a part of the California Wilderness Act. The good news is that the Forest Service has recommended in their Preferred Alternative a management level of 6383.5 feet above sea level. (The current lake elevation is 6377.1.) The very idea of a "management level" for a natural lake is absurd, but consider the source [of the idea, not the lake]. The bad news is that the Circus plans major recreational development for the Scenic Area, including campgrounds, paved roads and bike trails, interpretive sites at sacred places around the lake, and fencing off geological wonders such as the fissures at Black Point (to protect the Freds' liability, not necessarily the fissures!). The FS also takes spineless positions on grazing and native species reintroductions, and allows for continued snowmobile abuse of the Mono Craters (just south of Mono Lake). In short, the Preferred Alternative is extremely anthropocentric. Whatever happened to the primary purposes of the Scenic Area: "...to protect its geologic, ecologic, and cultural resources. . . ." [Indeed, the plan would entail the scenic area near-equivalent of a monoculture.]

At this time, the deadline for public comment is December 20, but environmentalists are confident that they will get a 30 day extension. A detailed article on the draft CMP/EIS and an Earth First! Alternative will appear in the December issue of the Journal. If you want a copy of the draft CMP/EIS, write: Inyo NF, Attn: Rec. Officer, 873 N Main St, Bishop, CA 93514, or call 619-873-5841. If you have questions or input regarding the soon-to-be drafted EF! position, contact Sally Miller (address in Directory).

-Sally Miller, Eastern Sierra EF!

Tongass Reform Passes House, Dies in Senate

In a stunning show of bipartisan support for reforming management of the Tongass National Forest in Southeast Alaska, the US House of Representatives passed the Tongass Timber Reform Act by a 361-47 vote. Unfortunately, Alaska's senators held the bill from consideration by the Senate. Alaskan activists are already discussing strategies for the next session of Congress.

Blockades and Lawsuits For Temagami

The Temagami Wilderness Society has sued the Ontario Government over its decision to build two logging roads through the virgin pine forests of Temagami, Ontario, Canada. The group seeks to reverse the government's approval of an inadequate environmental impact study, to force a public hearing on the matter, and to prevent any destruction until the case can be heard in court.

Meanwhile, the *Teme Augama Anishnabai* (Algonquin for 'Deep Water People') - Indians with a 111-year-old outstanding land claim to the area - have set up blockades in the forest. They have vowed to risk arrest and jail to block road construction. (*The Globe and Mail*)

SUBMERGED LANDS RAID ON FEDERAL LANDS BECOMES LAW

In August, President Reagan signed the "Submerged Lands" bill, thus repealing the submerged lands section of the Alaska National Interest Lands Conservation Act (ANILCA). The bill will result in conveyance of an estimated 1.1 million acres of federal lands to Alaska Native corporations - already the beneficiaries 44 million acres granted by Congress - and 700,000 acres to the state, which at statehood got 104 million acres of uplands plus another 50 million acres of tidelands and offshore submerged lands. (See article on submerged lands, *Eostar* 88.)

Of the 1.1 million acres going to the Native corporations, 694,000 are in National Wildlife Refuges, 18,000 in National

Parks/Preserves, and the balance in Bureau of Land Management lands. The state's share of the booty is entirely at the expense of BLM holdings.

Why did Congress so casually throw away nearly two million acres of public land, including over 700,000 acres of National Interest Lands set aside in ANILCA? Among the reasons, one is preeminent: the other side got a key break when Representative John Seiberling retired in 1986. As chairman of the House Interior Subcommittee on Public Lands, Seiberling was the House's expert on Alaska lands. During his last term, he instructed the combatants to negotiate a submerged lands solution for the Interior Committee's consideration, but the state and the Alaska Federation of Natives (AFN), with the backing of the Reagan administration, would not cooperate, and instead defied the ANILCA deadlines.

Representative George Miller (D-CA), Seiberling's successor as subcommittee chair, pledged to the Sierra Club that he would look closely at the bill, but was given bad advice from a staffer who uncritically accepted AFN's position. Miller was engaged in the battle over the Arctic National Wildlife Refuge and apparently was reluctant to take on the somewhat arcane submerged lands bill.

Another determining factor was AFN's distortion of facts regarding the Submerged Lands Section of ANILCA. Particularly irresponsible was its assertion that if its bill was not enacted, Alaska Natives would see their lands shrink as the state took over Native-owned submerged lands via court challenges pursuant to the Submerged Lands Act, which gives the states title to all lands under navigable water bodies. ANILCA guarantees replacement acreage in the event of such losses. But AFN's scare tactic swayed committee members predisposed toward favoring Native American legislative initiatives.

Senators Howard Metzenbaum (D-OH) and Quentin Burdick (D-ND) were able

to obtain one small concession. Their amendment directs the Secretary of Interior to report back within a year on ways of minimizing the adverse impacts from potential developments on the new inholdings, and on priorities for reacquisition of these new private holdings.

—Jack Hession, Sierra Club Alaska Representative

WHAT YOU CAN DO: Readers wishing to express their rage over this massive give-away of public lands should dump on George Miller, Chairman, Subcommittee on Water & Power Resources, Committee on Interior & Insular Affairs, US House of Representatives, Washington, DC 20515. Senator Howard Metzenbaum (Senate, DC 20510) was the only Congressperson who stuck his neck out on submerged lands. Metzenbaum, a defender of Alaska lands, deserves thanks for challenging the Alaska delegation time and again.

—Dave McCargo

UMETCO DUMP THREATENS COLORADO RIVER SYSTEM

Western Colorado EF'ers, undercover members of a newly-formed local environmental group — the Sheep Mountain Alliance — successfully staved off a San Juan National Forest attempt to hold a timber sale in a 400-year-old climax spruce-fir forest at the top of the Dolores and San Miguel River watersheds. Rallying unanimous local opposition in Telluride and the surrounding region, as well as Congressional support from Senator Tim Wirth and Representative Ben Nighthorse Campbell, the group forced stunned Forest Service officials to drop the Sheep Mountain area from their ten-year timber plan.

Dave Foreman, in Telluride for a River Rendezvous conference October 8, spoke at SMA's celebration potluck. "The victory here is important," he noted. But he admonished locals to tie in the local issues to the larger matter of global environmen-

tal destruction.

Indeed, now the region faces an even greater threat. Umetco Minerals Corp., a subsidiary of Union-Carbide Corp., has proposed a two-phase radioactive dump site near their old uranium/vanadium mill at Uravan on the San Miguel River — a tributary of the Colorado River System.

Phase one would relocate up to 500,000 cubic yards of radium tailings from an abandoned mill in Denver — material that now underlies large segments of that city's streets, residential areas, and schools. Radium, one of the decay products of uranium, has a half-life of 1700 years, during which time it continues to emit radon gas and is likely to lead to lung cancer in humans through repeated exposure. Umetco wants to dig a hole and dump the radium tailings on a bench just 300 feet above the river, in a geological formation notorious for fracturing and in a region noted for summer monsoon rains and landslides. The site chosen, Spring Creek Mesa, has much surface water for this semi-arid area, and also has an uncertain underground hydrological pattern that could lead to eventual migration of the water soluble radium off site and possible contamination of the San Miguel River.

Even scarier than phase one is phase two. At another site a few thousand yards uphill, Umetco plans to drill into the rim of the mesa's rock wall and store low-level radioactive waste from a four state compact area — Wyoming, New Mexico, Nevada, and Colorado (and possibly elsewhere, as the compact rules allow the dump to take waste from other places in the country if the appointed four-person compact board approves it). "Low-level," as many know, is a terrible misnomer, since some of the materials involved are highly toxic and long-lived. One "low-level" substance, Iodine-129 has a half-life of 17 million years. This phase two rim site is less than a mile from the river, shares the hydrological and geological problems of the phase one site, plus is

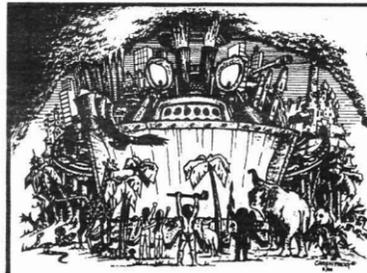
directly over an earthquake fault. Both these dumps would require trucking hazardous substances over narrow mountain roads, often alongside major waterways.

Both phases are on a fast track, since the Denver radium is the subject of a contract about to be let by the feds, and an already licensed facility in Utah is in the competition. Umetco had conducted studies on the same mesa two miles from the present sites several years ago. However, following a Superfund lawsuit and a subsequent settlement, Umetco closed its mill and demolished most of the company town of Uravan (it was highly radioactive), and is now involved in a 15 year, multi-million dollar, court-ordered reclamation project.

Using these old studies for a different part of Spring Creek Mesa, the Colorado Department of Health granted preliminary license approval to Umetco. Some county commissioners of Montrose County, noted for its pro-development stances, have encouraged siting the dump within its boundaries. However, Montrose County residents have risen in horror at the prospect of becoming the toilet bowl of the Rockies. A regional citizen group, the Western Colorado Congress, and all Telluride public officials, including the San Miguel County Commissioners, also oppose the proposal.

The Montrose County Commissioners and Colorado Dept. of Health have scheduled only one public hearing (Oct.19). Locals are planning actions to bring national publicity to this environmentally disastrous proposal. Although the state wants us to think public comment will be over October 19, don't believe it. Write Gary Broetzman, CO Dept of Health, 4210 E 11th Ave, Denver, CO 80218, and alert your own politicians and water watchdog groups in the Colorado River watershed. For information, write Art Goodtimes, Box 1008, Telluride, CO 81435 or call 303-728-4488.

—Art Goodtimes



International News

New Brazilian Park Established

Acknowledging the conservation arguments raised during the widest campaign ever made to protect a single wilderness area in Brazilian territory, the President of Brazil, Jose Sarney, signed a decree on Sept. 15 to establish the National Marine Park of Fernando de Noronha.

This park was first proposed in 1986 by a small coalition of volunteer conservationists concerned with the "touristic development plan" then proposed for the area. Fernando de Noronha is an archipelago of volcanic islands rising out of the Atlantic Ocean some 200 miles off the northeastern coast of Brazil, with several islets and a 17 square kilometer main island. Colonies of a dozen seabird species are found in the many cliffs, and the beaches serve as nesting grounds for Green Sea Turtles (*Chelonia mydas*). Two endemic land bird species also live there, and a bay harbors a resident population of Spinner Dolphins. Only a thousand people still live on the main island, working for a military airport and communications facility, fishing, and exploiting the small-scale tourist traffic that comes to dive in the crystal-clear water.

When plans were announced to dramatically increase tourism, more than 100 organizations from 25 countries wrote expressing support for preservation of the area as a national park. Individual letters from members of these societies also poured in — more than 10,000 from North America, over 2,000 from the UK, and hundreds more from other places.

As established, the park protects two-thirds of the main island, all smaller islands and surrounding waters down to the depth of 50 metres (about 160 feet).

Aussie Ozone Actions

Australian environmental groups held a nationwide day of actions to highlight destruction of the ozone layer by chlorofluorocarbons (CFCs). Demonstrations were held in seven Australian cities at stores selling products that contain CFCs. Bright orange stickers were placed

on retail items such as refrigerators and air conditioners to educate consumers about the real cost of purchasing those products.

The federal government had said it would go further than the Montreal Protocol, which aims to reduce CFC global production 50% by 1999, a goal that many see as too little and too late. Now, however, the government is backing off and preparing legislation that will just meet the Protocol. They claim their phase-out of CFCs in aerosols shows how Australia is "leading the world in ozone protection," despite the fact that most CFCs produced in the country are used in refrigeration and air conditioning units.

Distemper Killing European Seals

At least 11,000 Grey and Common Seals have died this year along Europe's North Sea coast, and far more deaths are expected, according to news reports from the region. The immediate cause seems to be an epidemic of canine distemper, but strong evidence also points to the severe pollution of the coastal waters.

The distemper appears to have come from the diseased bodies of more than 1,000 sled dogs dumped off the coast of Greenland this spring, the aftermath of an epidemic among dogs there. Thousands of seals migrate from Greenland to Western Europe each year, and the disease has spread explosively within affected seal colonies. Seal experts say as many as 80% of the seals exposed to the distemper virus will die, while the survivors will become immune.

Distemper is the immediate problem decimating seal populations, but pollution seems to be the ultimate cause. One reason for the virulence of the distemper virus is that it attacks the host animal's immune system, in addition to other tissue throughout the body. An animal depends for survival upon its immune system's ability to respond quickly to the virus, yet the seals have already suffered weakened immune systems due to pollu-

tion. A large body of evidence shows that industrial pollutants, especially polychlorinated biphenyls (PCBs), attack the immune systems of mammals, leaving them highly susceptible to infection. In the past five years, European scientists have noted a serious decline in the strength of seal immune systems.

Once the immediate epidemic has passed, pollution will greatly slow the population's recovery. PCBs cause sterility in female seals, an effect already evident in over half the female Common Seals in the Baltic Sea. Current estimates suggest that some 3.3 metric tonnes of PCBs pour into the North Sea each year. Countries bordering the North Sea have begun to cut back PCB and pesticide pollution of the ocean, but PCBs remain toxic for decades so the existing pollution will not decline any time soon.

The only encouraging note in this mess is the reaction of the European public. In late July, tens of thousands of people rallied in West German coastal villages to protest North Sea pollution because it's killing seals. On the North Sea island of Sylt alone, 30,000 residents and tourists linked hands to form a 40 kilometre (25 mile) long human chain.

—Dale Turner

GERMAN PLANTS MAY BE SAVED DOWN UNDER

Some parts of Germany are so badly affected by forest death attributable to air pollution that scientists are concerned about losing genetic material at the provenance level. ('Provenance' refers to local varieties of species that have become specially adapted to local conditions.) The main areas of concern are the Harz mountains, the Black Forest, and the forest of north-east Bavaria. In these areas of severe forest die-back all species and ages are affected. There is little chance of conditions improving in the foreseeable future.

The German government has agreed in principle to finance a scheme to remove the threatened plant communities to a place of safety in the southern hemisphere.

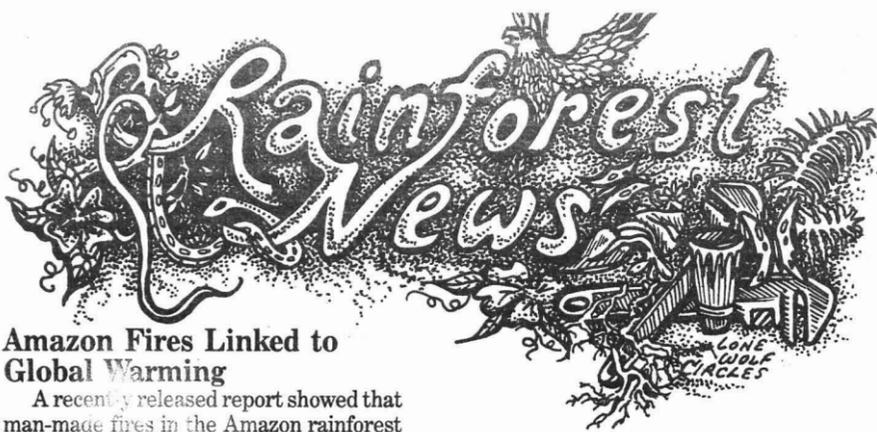
The place of refuge must have a suitable climate and day length, with conditions favourable enough for the plants to survive and reproduce themselves but rigorous enough to prevent "softening" of the genetic material so that they will remain "fit" for their eventual return to their home sites. Sites should also be free or nearly free from outside pollination. The only places meeting these requirements are in southern South America and southern New Zealand. Both will probably be used.

The suitable part of New Zealand, a 15,000 square mile region, lies between 45 degrees and 46 degrees south and has a more continental climate than the rest of the country, which has a maritime climate. This is because it is a region of basins isolated from the sea and from each other by mountain ranges which rise 5000 feet above sea level. This topography offers a wide range of micro-climates and it should be possible to find sites which match the German areas in terms of such factors as length of frost free growing season and duration of winter snow cover. Rainfall in the valley bottoms varies between 15 and 50 inches per year. The ground is predominantly weathered schist but calcareous soil types can be found.

It is envisaged that each plant community will be established on a site of between 2 and 5 hectares and possibly replicated. Each site will have its existing vegetation removed, will be fenced to keep animals out, and may be surrounded by a fire break. The existing vegetation is in most cases tussock grassland, but formerly the predominant vegetation was forest dominated by southern beech (*Nothofagus* spp.). Each site will be at a distance from any other — or from interbreedable, already introduced northern hemisphere plants — so as to maximise the chances of it remaining genetically pure. There are no major obstacles to importing seed into New Zealand. Suitable mycorrhizal fungi are already present. However, importation of fauna will not be allowed and importation of live plants in soil will be subject to rigorous inspection and may be prohibited.

The project will be a joint undertaking between New Zealand and Germany and is still at the negotiation stage. If the scheme is successful, it could well be extended to cater for "at risk" plant communities from other European countries and perhaps the northern hemisphere in general.

—Peter Smith, forest ecologist, Box 12, Waitati, Otago, New Zealand



Amazon Fires Linked to Global Warming

A recently released report showed that man-made fires in the Amazon rainforest contribute fully one-tenth of the global production of carbon dioxide, the principle cause of the greenhouse effect. It also suggested that the gases and particulate matter might be contributing to depletion of the planet's ozone layer.

According to the report by Brazil's Institute for Space Research, ranchers and settlers in the Amazon set 170,000 fires during the three-month dry season in 1987. Based on satellite images, the report "conservatively estimated" that last year's fires burned 80,000 square miles of forest, or 4% of the entire Amazon region. The fires released 620 million tons of carbon gas and particulates into the atmosphere.

Not all the fires are in virgin rainforest land; up to half burn previously cleared land. However, virtually all the fires are man-made. Because the standing rainforest is too wet to burn, workers must first cut the trees, then leave them to dry.

A pattern noticeable in the satellite images is the way fires, and thus forest destruction, follow new roads into the rainforest. One of the areas most heavily damaged in recent years is in the western Brazilian province of Rondonia. There, the World Bank loaned \$250 million to Brazil to pave the 700-mile road between the towns of Cuiaba and Porto Velho. Since the paving, half a million settlers have invaded the forest along the road. As a result, Rondonia lost 8.9% of its forest in 1987.

RAINFOREST CONSERVATION IN ECUADOR

The Tobar Donoso Project straddles the frontier between Columbia and Ecuador and covers an area of some 530,000 hectares of pristine rainforest wherein dwell the 10,000 Awa Indians. This project to protect the Awa and their forest homeland began in 1983 on the Ecuadorian side of the border with the first negotiations between the Awa people, the Ecuadorian Government, and CONNAIE (the Indigenous Peoples Federation of Ecuador). The program was supported from the outset by Cultural Survival, a United States organization dedicated to the protection of indigenous cultures.

Between 1983 and 1986, a *manga* (which means 'sleeve' in Spanish) was created by the Awa. This is a 150 mile strip of land which they slashed to demarcate their border. In some areas, settlement or logging had already reached their lands and there was no point in cutting a *manga*. In 1987, the Awa's land claim was accepted by the Ecuadorian government, and 130,000 hectares were declared an Ethnic Forest Reserve. In May 1988, 100,000 hectares of buffer zone were added to the reserve. Since 1986, World Wildlife Fund-US has provided \$50,000 annually to both governments to help create an overall management plan as a model of binational and international cooperation.

Much of the buffer zone surrounding the Awa land in Ecuador is still pristine rainforest. However, the combined activities of new settlers (*colonos*) and timber companies, and the advent of a new road, will clear the land up to the *manga* in a few years. This area includes the only pluvial lowland forest in Ecuador, with an annual rainfall of 1000 centimetres or more. In addition, the area connects with the Choco Refugia of northern Columbia - the most species diverse area in the most species diverse country on the planet.

In 1985, the Rainforest Information Centre of Australia (RIC) was invited by Federacion Awa to create land-use designs and to assist in planting the *manga*. Unless it is planted with long-lived species, easily distinguished from the surrounding vegetation, the *manga* would need constant clearing or would be quickly swallowed by the neighboring jungle. Be-

cause Ecuador's land reform laws provide that any "unproductive" land is available for colonization, the designs stress "productivity." Intense pressure for colonization results both from rapid population increase and from the unsustainable agricultural practices based on cattle and coffee.

In 1986, after two months talking with the Awa and walking their territory, the RIC submitted a report which was accepted by Federacion Awa, CONNAIE, and the Ecuadorian Government. The report proposed a buffer zone of perennial fruit orchards and timber plantations of mixed native species so as to surround the pristine rainforests with productive resources and to delineate the *manga* permanently. The land-use designs included more than 100 species identified by the Awa as well as useful exotic tropical fruits which pose no risks to the genetic integrity of the rainforest core.

In August 1987, we returned to Ecuador and began working with the Awa and the *colonos*, collecting seeds, constructing nurseries and shade houses, and planting the *manga*.

The *manga* is the first satisfactory method of physically delineating protected tropical areas in Ecuador. All the rainforest national parks in Ecuador suffer colonization. The national oil company (CEPE) has plans for a \$22 million road through Yasuni National Park in the Ecuadorian Oriente, part of the headwaters of the Amazon. This will release a flood of *colonos* into this land which is home to the Huarani Indians. The four other National Parks in tropical regions of Ecuador are being colonized, as are the 16 major parks of the Amazon Andes from Venezuela to Peru. These areas will remain under constant threat unless protected by armed guards or sustainable agricultural systems.

Project Tobar Donoso is the first attempt to surround undamaged rainforests with an ecological barrier, and the progress of this project will be watched closely by scientists and ecologists. Can the global environmental community collaborate with governments and indigenous groups in creating sustainable buffer zones around pristine rainforest areas? In this context, the effort to plant the *manga* has broad significance.

We have collected seed of useful fruits selected by the Awa over many genera-

tions. Seed is also being collected for the *manga* from the Oriente and improved fruit strains are being brought from tropical Australia and other countries. These are being planted not only by the Awa, but also by surrounding campesino populations on their lands, and this effort is starting to stabilize agriculture in the region.

We are now planning an ecological education program in the three provinces that border the Awa land. We envision a buffer zone of awareness and prosperity which will withstand the considerable pressures of the coming decades.

The province of Napo is the northernmost of the three provinces in Ecuadorian Oriente. This area is part of the world's largest neo-tropical refugium - an island of diversity untouched by the successive Pleistocene Ice Ages - in which we find the peak of Earth's creative endeavours maintained through our own era. Currently, the land-hungry, ever-increasing population of Ecuador is following the roads constructed by the oil companies and is rapidly undermining the ecology of the Ecuadorian Orient.

Under the auspices of Project for the Watersheds of Rivers San Miguel and Putumayo, the RIC has begun a project to collect timber, fruit and medicinal species. These are the first steps in achieving sustainable alternatives to the present land-use methods of the colonizers: Colonizers typically cut and burn the forest for coffee plantations and cattle ranches; then, after a few years, when the meagre fertility of the rainforest soils is exhausted, the new settlers move and clear new forest again, destroying it forever.

The Project for the Rivers San Miguel and Putumayo was conceived at a binational level between Colombia and Ecuador, following the signing over a decade ago of the Eight Nations Amazon treaty aimed at sustainable resource management of the watersheds of the Amazon Basin. However, international assistance will be necessary to implement the program, which on the Ecuadorian side includes the whole province of Napo.

-Douglas Ferguson, c/o Casilla 344-A, Ulloa y Ramiro Davilos, Quito, Ecuador; and John Seed, RIC, PO Box 368, Lismore 2480, NSW, Australia

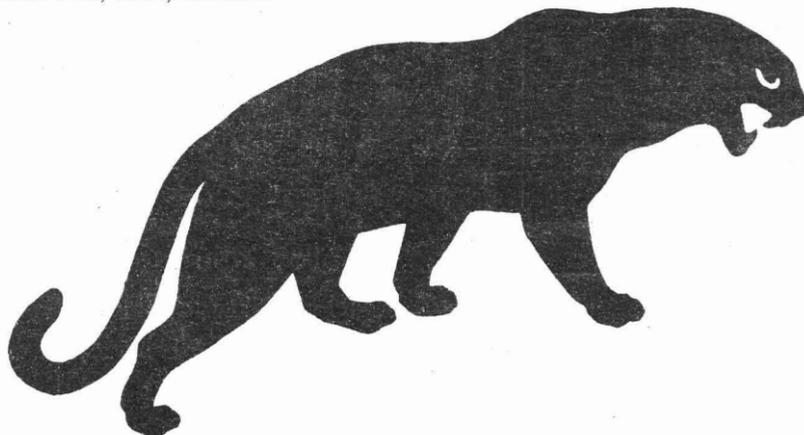
FOREST PEOPLE ADDRESS ANTI-WORLD BANK CONFERENCE

The Forest People, an Amazon based rainforest action group, were among the speakers at the Anti-World Bank Conference, September 23-24, in West Berlin, Germany. Three Forest People organizers pleaded for the audience's assistance in saving the rainforests which, they said, necessitates confronting the International Monetary Fund and World Bank. The conference was held while some of the 10,000 government ministers, bankers, and officials planning to attend the annual IMF-World Bank Conference, this year in West Berlin, met in closed quarters in preparation for their conference, September 26-29.

The Forest People is a coalition of indigenous people, culture workers (workers who collect things in the rainforest), and small farmers who are fighting a common enemy to stop rainforest destruction - capitalism. For the Forest People, the IMF and World Bank personify the enemy. They see the destruction of the Amazon for projects initiated by money from the IMF and World Bank. They understand that Brazilians are forced by their government into economic activities which exploit the rainforests in order to pay Brazil's international debts of more than \$110 billion. Such projects and activities include building dams, overharvesting wood, clearcutting for cattle grazing, and cultivating crops on large plantations for export, all of which force small farmers to clear rainforest lands to farm.

To contact the Forest People, write: Jaime S. Arrujo (Presidente Conselho de Seringueiros da Amazonia), Rua Profa Lucinda Felix Azevedo No.32-Casa 27B, Japiim I-69068-Manaus, Amazonas, Brasil.

-Frances Goftschalk, Federal Republic of Germany



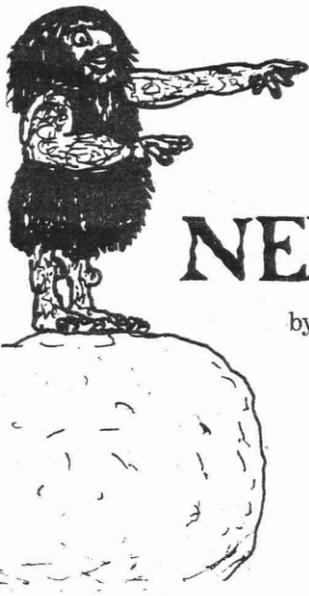
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NEMESIS NEWS NET

by Australopithecus

Portland Neighborhood Defends Oak

Enraged citizens of Southwest Portland's Corbett neighborhood have taken direct action to stop Philip Morford of Metropolitan Homes Inc (of Lake Oswego) from felling a venerable Oregon White Oak to clear the way for eight new houses. At one protest late last summer, 35 neighbors gathered around the six foot diameter oak, wielding shovels, fists and compelling words to stop would-be tree cutters. One feller fled after a protester broke his chainsaw with a shovel. Thereafter, Friends of the Oak wrapped the tree in chicken wire, tire chains, flowers, and signs of protest to defend the giant; and took turns guarding it all night. The city forester estimates the tree to be 250-300 years old but says he cannot save it because it is on private property. If any readers know of the standing (or falling) of this tree, we'd appreciate the news.

Motley Crue Saves Ducks

As we all know, heavy metal in the form of lead shot is a major cause of population declines among ducks and geese. However, another form of heavy metal is now being used to *save* waterfowl. At a settling pond contaminated by cyanide in western Montana near Whitehall, heavy metal "music" is played loudly all day to deter waterfowl from alighting on the water. The superintendent of the Golden Sunlight Mine (where cyanide leaching is used to extract gold from the ore body), having heard that rock music was used to drive birds away from a New York airport, decided that Twisted Sister and Motley Crue would surely prevent birds from mistaking his toxic dump for a placid pond. (*Arizona Daily Star*, 9-6)

Lightning Strikes New England Electric's CEO

Lightning killed New England Electric Systems chief executive officer, Samuel Huntington, while he was hiking near Independence Pass in the Colorado Rockies this past summer. Huntington had been in Aspen to address an energy policy forum. So forceful was the bolt that it knocked his clothes off. (*Aspen Daily News*, 7-28)

Vancouver Trees Exorcised

Exercising our limbs is appropriate; exorcising our trees is not. Yet, the latter practice has become alarmingly common in Vancouver, British Columbia, where vandals and superstitious persons alleged to be Asian immigrants have poisoned and felled many of the city's 130,000 stately trees. Vancouver parks board officials think that some of the murders are committed by amateur loggers who have an irrational hatred of trees, and some are committed by Chinese immigrants who believe that trees block evil spirits from escaping their neighborhoods. (*Democrat & Chronicle*, 9-4)

Zimbabwe Rangers Shoot 4 More

Poachers in Zimbabwe have killed 400 Black Rhinoceroses in recent years for their horns, which fetch about \$25,000 on the black market. Zimbabwe's fast dwindling Black Rhino population, now at about 1500, is the largest extant population of that species. Three years ago, park rangers initiated a defense strategy to save the Black Rhino from extinction. So far, that defense has entailed shooting 43 poachers. The latest four killed were in Zimbabwe's wild northern Zambezi Valley. In the midst of the gunfight, one poacher in the group of five escaped and soon crossed a river into Zambia, from whence some of the poachers come. (*L.A. Times*, 7-4)

Eyes Deter Bird Attacks

In past NNN columns, we have reported on the growing number of birds who sacrifice their lives to damage, sometimes destroy, military and civilian aircraft. It now seems the ever industrious Japanese have found a means of deterring the bird attacks. Japan's All Nippon Airways has painted huge eyes on some of their planes. Since adding the eyes one year ago, Nippon has saved an estimated \$300,000 in damages. ("Focus," World Wildlife Fund newsletter, 1250 Twenty-fourth St, NW, DC 20037) Nippon will soon add eyes to all its large planes, yielding the mixed blessing of saving birds' lives, but preventing them from damaging the flying heaps. Perhaps Nippon would be even more successful in preventing bird/plane collisions if it adorned the eyes in dark sunglasses.

Meanwhile, doves that were damaging planes and obstructing airways at Jacksonville Naval Air Station have been systematically harassed by Navy personnel. The Navy finally drove away the winged saboteurs with fire crackers.

Will the Sun Correct the Imbalance?

Scientists have recently discovered that cows, increasing numbers of which have been raised in recent decades to meet rising demands for beef, are contributing to the Greenhouse Effect through their release of prodigious quantities of methane gas. A corollary of this is that cow flatulence may promote the inundation of much of the world's coastal wetland habitat. Concurrent with and related to the rising Greenhouse Effect is the depletion of the ozone layer; and it is this, ironically, that may now be killing cows.

In East Gippsland, Australia, in June, sunburn killed six Friesian heifers, valued at \$600 each. Concurrently, photosensitization adversely affected 22 other neighboring heifers. All 28 victims were pregnant or had just calved. Post-mortems of the deceased bovines indicated liver damage, and veterinarians suspect fatal sunburn may have been related to pasture mold or fungus on the kikuyu grass, as well as to the increased levels of ultra-violet light that now pass through Earth's thinning ozone layer. (*The Weekly Times*, 6-15)

Crows Terrorize Neighborhood

A flock of 10 American Crows has established a stronghold around Ninth Street, Fargo, North Dakota, and is attacking all intruders, including the paper boy. A crow bit the head of the paper boy, causing him to cry and a neighbor to call the police. The crows are feeding upon small birds and squirrels and dumping their remains in birdbaths. (*Fargo Forum*, 6-28)

Robins Defend Turf

Meanwhile, a pair of American Robins was also demonstrating territoriality, at the home of a human resident of Mesalonskee Lake, Oregon. After the man had twice removed the robins' nest from his house, the robins began to protest vociferously. They pecked at windows and doors, and eventually found his bedroom window; whereupon they commenced awakening him at dawn. The man said he may stop resisting them but wishes they'd nest in the trees in his yard instead. (*Portland Press Herald*, 6-18)

Freddies Push Propaganda

The Forest Service has recently published five brochures, ostensibly to promote citizen involvement in the National Forest planning process, but actually, it seems, to counter increasing public criticism of its anachronistic policies. The topics of the brochures are Old-growth Forests, Clearcutting, Economics, Forest Roads, and Herbicides. To provide a sample of the enlightening statements in these papers, we quote from "Clearcutting: A Matter of Ugly Ducklings":

Some call clearcutting ugly, dirty, a threat to soil, wildlife, a perpetrator of herbicide use... However, foresters look at clearcuts as "ugly ducklings" that grow up to be beautiful.

Army Loses Deadly Viruses

The US Army and facilities at Ft Detrick, Maryland, and the Centers for Disease Control (CDC) have, for years, routinely sent shipments of deadly experimental viruses through the mail. A former Ft Detrick researcher recently revealed that shipments are occasionally lost or mislabeled. Last year, the researcher disclosed, a shipment of Crimea-Congo virus, a deadly tick-borne disease, sent from CDC to Ft Detrick, did not arrive; that is, the package arrived, but in it was an entirely different substance. Where the virus went, no one knows. The CDC later denied having sent the virus.

New Postmaster General Anthony Frank has stated his intent to halt the shipments. He feels it is not the proper role of the US Postal Service to be a transporter of biological warfare agents. "The Army ships parts by United Parcel Service — let them have the anthrax, too," Frank said.

Most of the shipments do go by private carrier, according to Chuck Dasey, spokesman for the Army's Medical Research Institute for Infectious Diseases at Ft Detrick. Dasey said that the Institute sent 48 shipments of germ agents to private and military labs in 1987, and that the Army prefers Federal Express because of their speed. Speed is important, as most shipments involve live viruses packed in dry ice.

Under a 1972 treaty, the US and over 100 other nations agreed not to use biological weapons, but the US Army has continued ostensibly defensive testing: use of protective gear, decontamination techniques, and other procedures which, of course, are actually preparations for offensive capability with biological weapons. The Army plans to increase shipments of such infectious disease agents as anthrax, botulism, Q fever, and dengue fever, when it completes its new biological warfare testing facility at its Dugway Proving Grounds in Utah in the early 1990s.

The Foundation on Economic Trends, a group working against gene splicing and other dangerous biotechnology innovations, has petitioned Defense Secretary Frank Carlucci to halt shipments of infectious agents by US mail or private carriers. The Foundation asked the postmaster general and the Transportation Department to study the dangers of military germ shipments between Army facilities and 129 private laboratories, hospitals and universities that study the toxins. Jeremy Rifkin, president of the Foundation, explained: "The Department of Defense is shipping the deadliest diseases known to man without taking any substantial precautions... If released by accident or through terrorism, these pathogens could cause damage equivalent to that of a nuclear meltdown." (*L.A. Times*, 6-14)

Trickster Eats Cats

The Trickster has reached New England! Spreading east to fill the niches from which the Gray Wolf and Red Wolf (the latter only in the Southeast) have been exterminated, the redoubtable and ubiquitous Coyote appears to have reached the Eastern Seaboard, from whence — barring unforeseeable trickery — it shall run eastward no further. Coyote sightings have been reported in New Hampshire and Massachusetts recently (even within 25 miles of Boston), and in Canada's Maritime Provinces, as well as in states southward. While Coyotes in some Western urban areas, such as the foothills around Tucson, sustain their vigor with occasional poodles to supplement their diet of small wild prey, cactus fruit, and human food scraps, Coyotes in New Hampshire appear to favor cats as dietary supplements. In Berlin, New Hampshire, 10 cats have recently fallen prey to a predator thought to be a Coyote. This Berlin Coyote may be pushing its luck. Its last victim was Fred. Fred was the police chief's cat. However, a local game warden reminded distraught Berlin residents that Fishers, foxes, and owls occasionally seize domestic animals.

Snakes Attack Village

In mid July, multitudes of red poisonous snakes "surrounded and occupied" a village in Kurdistan, Iran. Reporting the incident, the Iranian newspaper *Keyhan* explained that health officials of the revolutionary Jihad ministry were ordered to drive the snakes away with pesticides. The paper noted that the snake population has boomed as hunting by humans has decimated carnivorous bird populations. (*SF Chron*, 7-16)

Lightning Strikes AZ's Nuke Plant

During the midst of Arizona's summer monsoons, lightning struck the Palo Verde Nuclear Generating Station, causing the Unit 3 reactor to shut down. This was perhaps the most spectacular in a long series of mishaps at Palo Verde. Previous mishaps, such as a fire on June 6 that destroyed an auxiliary transformer and shut down Unit 1, remain unexplained, but appear to be the work of infiltrators. Despite its regular problems and many shutdowns, Palo Verde operators have boasted that Unit 3 broke the record for nuclear reactors by extending to 215 the number of consecutive days that it had continuously generated electricity. (*Arizona Republic*, 8-2)

Aborigines Save Crocodile From Police

In Northern Territory, Australia, recently, elders of the Gumatj tribe insisted that police stop hunting a crocodile that had killed one of their people, because the reptile is sacred to them. The crocodile had bitten in half a 25 year old Aborigine camped alone at a pond near the Cato River of Arnhem Land. Saltwater crocodiles inhabit much of northern Australia, and have been protected since 1974, by which time hunting was threatening them with extinction. In the last two years, crocodiles have killed 11 people. (AP, 10-3)

It's 7 PM; Do You Know Where Your Marines Are?

Why, they're out rustling cows! One evening in late September, a Fresno, California, cop, off-duty, caught three men gutting a cow. Approaching them with is .357 Magnum, he announced that they were under arrest for cattle rustling. The men surrendered and identified themselves as Marine staff sergeants from Camp Pendleton.

Bear Sightings Increase

Even as Trickster makes its presence felt in New England, Ursa is doing likewise, though loath to do so. As housing developments and second homes spread like the plague through hilly western Massachusetts, that rural region's Black Bears find their anonymity increasingly hard to maintain. Although many residents perceive a rise in Black Bear populations, in actuality it is the increase in humans which is causing more bear sightings. The new residents in western Massachusetts are indirectly destroying bear habitat, but are not directly hurting individual bears; they are more apt to seize cameras than guns, upon spying a Bruin. However, Massachusetts farmers claim growing crop losses due to bears. Franklin County farmers last March asked the state to extend the one-week bear hunting season in September. In 1987, 34 bears were shot. (*Valley News*, 7-21)

Recluses Emerge, Evict Parson

Hundreds of recluses, these ones of the eight-legged variety, have so intimidated members of the First United Methodist Church of Sparta, Tennessee, that the churchgoers have elected to abandon their parsonage. Brown Recluses, one of this country's more poisonous spider species, expanded in population in Tennessee following three mild winters and this summer's hot dry weather. In particular, the spiders expanded in population in the Reverend Neal Glass' home. The reverend and his family grew weary of finding aggressive spiders on curtains, towels, and clothes. Glass complained, "Most everybody we talked to had a relative or friend who had been bitten with serious repercussions." (Though I've no knowledge of arachnid anatomy, I'm sure that Glass is wrong; spiders bite with mandibles.) Glass and his fellow Spartans, living up to their name for a time, attempted to exterminate the spiders 16 times before finally electing to try to sell the house. On the 17th attempt, however, they paid an exterminator \$4725 to seal and fumigate the house.

Local Group Grassroots Sprout

By Dale S. Turner

For an activist, information is power, and the best information is the most timely and the most directly applicable to the issues at hand. For those who want to be more effective in a campaign, the major questions come down to what's happening now, what needs to be done, and who to contact.

For better or worse, the growth of the Earth First! movement has long outstripped the ability of the *Earth First! Journal* to provide that sort of information for every issue that EF!ers undertake. Also, local EF! groups have a difficult time using the *Journal* mailing list when sending news to EF! folks in their area, since the *Journal* has a long-standing policy of giving the list to NOBODY (we do special mailings for local EF! groups, but it's a somewhat cumbersome process).

The answer? Local groups have started their own newsletters all around the country, with their own mailing lists and publication schedules. They range from single-page updates to a couple of stapled pages (the norm) to the 24-page Washington EF! newsletter, from the intelligent-street-punk eco-zine put out by EF! Santa Cruz to the professional-looking Wild Rockies Journal.

Besides giving details on issues and actions these newsletters contain good essays, such as the "Humanitarianism" piece reprinted below. We offer here a sampler of newsletter articles, to give you a taste of what's out there. To get more, contact the individual groups.

If your local group puts out a newsletter, get yourself on their mailing list. If you're not in the thick of things, it's the only way to stay in touch with local campaigns. If you want to follow issues in another part of the country, or look for useful tactics from other groups' campaigns, subscribe to other newsletters.

Finally, as with all such efforts these newsletters cost money to produce. Lots of folks donate time for their production, but somebody's got to pay the printer. So far as I can tell, none of the newsletters has a fixed subscription fee, but you should probably figure \$5 as a minimum and \$10 or more is appropriate. The money will be well-spent.

EF! and Humanitarianism

The most frequent criticism leveled at the Earth First! tribe is that we are not humanitarian. We counter that we represent the nonhuman species for the benefit of all life forms. This is a subtle cop-out mired in the very dualistic thinking we attempt to defeat. Herein I aver that it is essential for biocentrists to become humanitarians.

First, from the ecological standpoint, there are too many humans for Earth to cope with. Farther-reaching in scope than population density, however, is the population "pressure" factor, that is, the ratio of human population to resources consumed. By virtue of extractive technology and greedhead consumer values, Americans are the world champ gluttons, swallowing, for example, 75 times more resources per person than India. Excess human biomass, and frivolous consumption, must be reduced.

Second, consider the political angle. Virtually all the food available in the "civilized" world comes to us through the degradation of the Third World and/or the farmer cultures. One may opt out of this accessory-to-the-crime role by growing his/her own food and/or hunting, say, pigeons. But city soil is suspect and, like all humane and ecologically sound hunting practices, urban hunting is classified "poaching" by the legal system to support the meat and hi-tech hunting industries. You face severe penalties if you're caught.

Third, consider the nutritional facts. The more closely your food's chemical makeup approximates your own body chemistry, the more readily you metabolize it; the more benefit you derive from it. Ask any nutritionist.

Finally, use simple logic. You are what you eat, and no one wants to be a turkey, chicken, nut or vegetable.

So when considered ecologically, politically, nutritionally and logically,

humanitarianism is the only viable route. Vegetarianism and omnivorism-minus-peoplemeat are obsolete.

Human consumption reduces population density and, if you choose your meat properly, drastically reduces population pressure as well; better to eat one Yankee than 74 Indians. Remember too that people provide us with our highest quality nutrition. Furthermore, human consumption does not abuse the Third World or our own farmer, and it presents less poison risk (generally) than the backyard veggies.

It does, however, still come under the label of poaching ("illegal hunting") and entails, I am told, even stiffer penalties than hunting and eating our feathered brethren. Then too, my "logical" argument weakens as I reflect upon it. Maintaining one's humanness is a dubious endeavor, highly suspect in light of 3,000 or more years evidence. Our course, fellow Earth First!ers, is not easy. The path to eco-purity is not paved.

But humanitarianism is the best course, if not a comfy one, and we must take it if we are to gain credibility.

-Chicago EF! Newsletter

THE ENEMY

by A Concerned Grader

Editor's note: This feature appears periodically to help us understand the nature of the industry with whom we struggle. Last issue, we printed some quotes from various members of the industry in Whatcom County. This issue, a concerned millworker ... discusses old growth and its relationship with his mill.

I have been a timber grader in a sawmill for four years. As a grader, it is my job to visually inspect lumber and upgrade the quality of the boards to the most cost effective grade. Each day I grade over 80,000 board feet. Having seen this much lumber, I can honestly say that I see no good reason to cut old growth timber.

Of the old growth logs (30 inch or more in diameter) that I see in the mill, I would estimate (conservatively) that over 70% becomes chips. We get whatever good lumber we can out of each log (usually very little) and chip the rest.

Generally speaking, the longer a tree stands, the more time nature has to work against it. Nature's abusive elements lead to defective lumber. The list of defects is long and includes anomalies such as wind shake, ring shake, compression wood, timber breaks, pitch seams, and many forms of rot (peck, dot, and sap rot). Most old growth logs contain several defects in combination, making them useless as lumber. It is not uncommon to see a 60 inch log fall apart on the head saw carriage as it is being sawn open. Other old growth logs that appear to be free of defects contain so much tension in their heartwood (timber bind) that they are virtually impossible to saw straight. This tension not only leads to warped boards, but can also destroy saws, which poses a hazard to mill workers....

In our mill we specialize in large timbers. Strange as it may seem, we get our best timbers from second growth logs. These second growth logs generally are straight, medium grained with small well-spaced knots and relatively few minor defects. The quality of second growth logs far exceeds that of old growth.

So why do old growth trees get cut? I think the problem has more to do with attitudes than economics. The prevalent attitude I have encountered views an old growth forest as a stand that is past its prime but has some merit as salvage. The average forest products industry worker believes that old growth that is left to stand is a waste of our resources and is a result of poor resource management.

These attitudes must change.
-Washington EF! Newsletter

THE SNAIL DARTER MARCH

by Neal Tuttrup

Been keeping my house at about 55 lately; might be a little easier for me though, since I'm a native Illinoisian rather than a native Texan. Native to a state where 55 degrees doesn't mean quite the same thing it does here in Texas. Been

Newsletters - ing New Shoots

o.k. too, a couple sweaters and I'm usually comfortable. But not the other morning; for a few minutes, 55 just didn't feel the same.

It was one of the first few cold mornings of 1988. I was huddled under a sleeping bag nursing a cup of coffee and listening to Bill Oliver's tape Texas Oasis. The song Snail Darter March came on. As with most of Bill's songs, the subject of the Snail Darter March - *extinction* - is a little depressing, but when addressed in Bill's enthusiastic style, not as depressing as it would otherwise be. So, I let my mind bounce along with the lively beat of the song. I was so dimly focused on the happy sound of the instruments that I'd forgotten completely the ending of the song - a litany of names from the endangered species list recited over a military drumroll and the playing of taps. It was then I felt the eerie chill in the house. While they were still reading, I stood up and began to pace back and forth. I looked out the windows, and what my eyes fell upon seemed also eerily cold. The fuzzy tractable mind that had so willingly followed most of the song had changed in character, had become unsettlingly intense. I struggled to understand how these names I'd heard before so suddenly changed, why at the end of the song I felt a tear on my cheek and the eerie coldness within me.

It's funny that I should still be surprised by this feeling, because I've felt it many times before. It's always been immediately after I've been blasted point-blank with some contemporary environmental reality: after hearing of the extinction of Florida's Dusky Seaside Sparrow last summer, after viewing the Four Notch area in East Texas - 4 1/2 square miles of diverse forest that Forest Service management has reduced to charred ground, after hearing Lou Gold speak of the threats to Oregon's remaining old growth, after hearing the Snail Darter March.

I now understand what was so different about the other morning, why the names roused in me was stronger than ever before. The difference didn't lie within the names, I had heard them all before, and the ominous implications of endangered status didn't change much in the few minutes I spent listening to the song. What had given the names their power was my realization that I had failed to recognize their significance - or that of any environmental atrocity - until it had been placed at my feet where I could fall over it. It shouldn't take that - damn it, it just shouldn't.

I can speak fairly only of myself, but if other environmentalists share my insensitivity, are we justified in criticizing those who are merely more insensitive than ourselves? Are we guilty of the same crime, only to a lesser extent?

The tear on my cheek was of shame that it hadn't been there sooner, of regret that I had failed to recognize the plight of a friend until it was perhaps too late. That it is perhaps not too late is of no consolation, for delay at this time comes at a staggering cost.

-The Texas Oasis: Texas Earth First! Bulletin

We are having bumperstickers made:
Keep Maine Green
Shoot A Developer
-Gulf of Maine EF!

TEACHING THE CHILDREN EARTH FIRST!

by Kathy Hands

It certainly seems that Earth First! has become the target of spirited and sometimes spiteful tongues. I haven't paid much attention to charges of ecobrutalism, fascism, sexism, etc., but something heard recently has gotten me somewhat fired up. Several people have really disliked the Colorado EF! T-shirt, which depicts a child holding a monkeywrench and the words "Teach the Children Earth First!" I gathered that they feel allowing children their own choices is very important, and that our shirt implied imposing a viewpoint, teaching children to monkeywrench, onto children.

My feeling for what the monkeywrench symbolizes is much different. The danger

with symbols is that interpretation is often only skin deep, so I would like to pass on what the symbols and words on the Colorado EF! shirt say to me.

Teach the children Earth First! - a simple way of expressing something not so simple. I do not believe Earth First!ers are really interested in raising their children to wax rhetorical or become systematic bulldozer bashers. We believe that all life has a right to simply be, and we want our children to be part of this. To me, teaching children Earth First! would mean:

1) Teaching children respect for the Earth and their place in it.

2) Passing on resistance to the twisted societal systems we are surrounded and imprisoned by - passing on the "monkeywrench."

Teaching our children respect for the real world is tricky, especially considering that most of us never had elders to teach us, that ties of kinship and tribe have withered away. We must show our children, as well as we can, the connections between themselves, their actions, and the Earth. To do this, we should immerse children in the wilderness and open spaces so that they come to know the real world better than they know the world of concrete and glass. And here, in the lifeway we choose to show our children, lies the link between respect for Earth and resistance.

What better way to resist life-usurping systems than to live a simple, non-consumptive lifeway? I say 'lifeway' rather than 'lifestyle', for the latter implies dressings rather than substance. The choices we offer our children should not be mere changes of dress over the present ill society. We must pass on constraints of living to our children, a respect for the limits of the Earth. To say that the next generation will simply live with the Earth would be extremely naive - this will take generations. I was raised in this society; it is impossible to cut the ties that bind me to it. Our children will have ties as well. We must strive to provide some alternative to this society so that the values we try to pass on to our children can survive.

Resistance is not simply in the way we live; it is in the defense of our "home" as well. We owe it to our children that they be taught who the enemies of the Earth are; what forces are at work destroying rainforests, the woods on the edge of town, cultures the world over. We owe it to our children that they know the power of those forces, that they know a healthy fear of them, that they come to know all ways of defending their backyards, Turtle Island, the Earth - from democratic participation to lawsuits to civil disobedience to pulling up survey stakes. I consider all these methods of resistance to be forms of monkeywrenching, and I believe our children can make their own choices as to what defense works best for them.

As for myself, there are many things I feel a need to know before I have a child. I want to know the comfort of a simple shelter, the feel of a knife in my hand, the taste and appearance of wild things. I am pessimistic enough to believe there is a third category of knowledge to pass on to my child - the survival skills of the 21st century.

-Walkabout, CO EF! newsletter

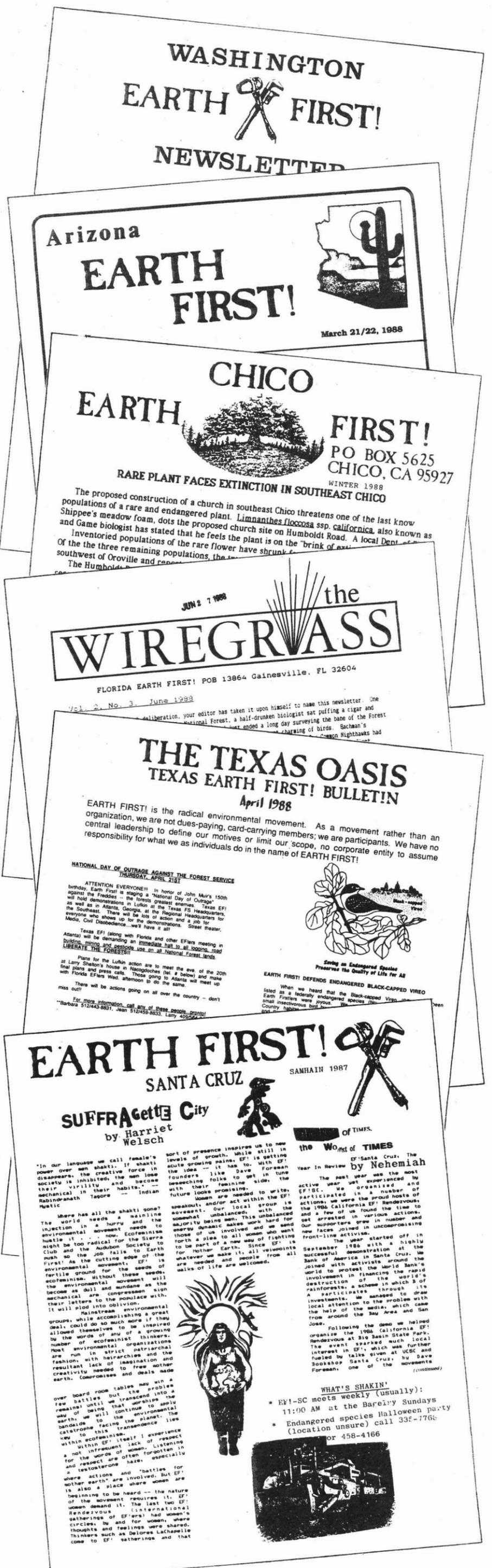
Internationally, condoms have been touted as a simple but effective method to prevent social diseases and limit unwanted population growth. Unfortunately, many of the problems associated with growth and development cannot be prevented by simply slipping condoms over the heads of developers. Therefore, Earth First! suggests that Pima County use another popular theme and start a campaign centered on the slogan, "Just Say No To Development."

-Arizona Earth First! Newsletter

Florida EF! Proposes Nuisance Human Program

The Florida Game and Fresh Water Fish Commission's "Nuisance Alligator Program" is working overtime these days. Since the recent death of a 4-year-old girl in the jaws of an alligator that had been

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EF! Directory

The Earth First! Directory

The Earth First! Directory lists the contact points for the international Earth First! movement. It is divided into four sections: 1) National EF! offices in the United States; 2) International contacts; 3) Active EF! Chapters or Groups; and 4) Contact persons where there is as yet no active EF! group. If you are interested in becoming active with the Earth First! movement, reach the folks listed for your area.

Earth First! The Radical Environmental Journal is an independent entity within the international Earth First! movement, and is not the newsletter of the Earth First! movement. It does, however, provide a forum for Earth First!ers around the world. This directory is provided as a service to independent EF! groups. If you would like to be listed as a contact or as a group, PLEASE contact Bob Kaspar (305 N. Sixth St., Madison, WI 53704 (608)241-9426). Please send address changes or corrections to him also. If you do not have a phone number listed, please send it to him. Bob acts as coordinator for local EF! groups for the EF! movement.

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USUAL DISGUSTING PLEA FOR MONEY

The Earth First! movement runs on your financial support. We don't need as much as other groups since we are grassroots, volunteer, decentralized and have low overhead. Moreover, you get to select where your hard-earned money goes. Don't send your contributions to this newspaper, send them directly to one of these hard working groups:

*Earth First! Foundation, POB 50681, Tucson, AZ 85703

(contributions to the Foundation are tax-deductible)

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*Bay Area Earth First!, POB 83, Canyon, CA 94516

*EF! Biodiversity Project, Jasper Carlton, 2365 Willard Road, Parkersburg, WV 26101-9269 (Contributions to the EF! Foundation earmarked for the Biodiversity Project are tax-deductible.)

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*Nomadic Action Group, POB 210, Canyon, CA 94516

*Oregon Earth First!, POB 1437, Merlin, OR 97532

*PAW (Preserve Appalachian Wilderness), RR 1, Box 530, North Stratford, NH 03590

*Portland Earth First!, POB 13765, Portland, OR 97213

*Santa Cruz Earth First!, POB 344, Santa Cruz, CA 95061

*Texas Earth First!, POB 7292, University Station, Austin, TX 78713

*Washington Earth First!, POB 2962, Bellingham, WA 98227

*Wolf Action Network, HCR 79, POB 1046, Crowley Reservoir, CA 93546

This fundraising appeal is placed as a service to the Earth First! movement.

THANK YOU for your support!

Bulletins

***SOUTHERN CALIFORNIA EARTH FIRST! RENDEZVOUS**, November 11-13, Wilderness Gardens, off Highway 76, San Diego County. For information call your local contact or Pamela (619)481-2856 or Todd (619)481-6784. There will be a potluck Saturday night. Water is available.

***ACTION ALERT!** The Women's Caucus at the California Rendezvous decided to sponsor a National Day of Protest, "NO SHOPPING AS USUAL," to be held on Saturday, December 3 to coincide with the height of the annual Consumeritis Epidemic. We'll focus on, and provide facts sheets for, Women's personal hygiene and cosmetics, household toxics, diapers, and packaging, plus add information on the global impacts of consumption. We encourage all women to sponsor an event in their bioregion on this day. It's time for Earth First! to maul the malls and challenge the "American Way of Life!" If you'd like to receive a packet of literature, suitable for copying (we'll try to direct you to recycled paper if you can't find it), and also if you'd like to send art, information or - you guessed it - MONEY, contact Connie Ross at 1349 Carleton St, Berkeley, CA 94702.

***SOUTH BAY EARTH FIRST!** Earth First!ers in the South San Francisco Bay

Area interested in forming a local group, contact Rick Bernardi, South Bay EF!, POB 20803, San Jose, CA 95160; 408-927-0274.

***PROTEST FOR ELEPHANTS.** On Saturday, December 10, Colorado Earth First! will demonstrate outside stores that sell ivory and elephant skin. So far, other cities slated for demos are Santa Fe, Albuquerque and Los Angeles.

The Elephant Protection Act has cleared Congress as part of HR 4783, which reauthorizes the Endangered Species Act. Unfortunately, the Act does not call for a total ban on elephant products - merely studies, financial aid, and possibly moratoriums on certain countries that don't do enough to stop poachers. A total ban would have a major impact on the world market and would save at least 25,000 elephants that are killed annually for the US market. Sending money to African governments to protect the elephant is a bad idea, because many government officials have been implicated in the illegal ivory trade. The only way to stop the slaughter is by eradicating the demand for it.

If you haven't heard about any actions in your area, contact me. I have petitions, leaflets, and agitators. I would especially like to hear from folks in the Clifton, New Jersey area, where allegedly there is a piano company using ivory for piano keys. Write: Resa Gordon, 10876 Victorian Dr, Parker, CO 80134.

***PLANET IN PERIL: RESTORING THE BALANCE.** A conference about coping with human impacts on planetary systems will be held February 3-5, at the University of Colorado, Boulder. Topics include the greenhouse effect, ozone depletion, and inequities between nations. Conference fee is \$20. For information, contact the CU Environment Center, Campus Box 207, U of CO, Boulder, CO 80309; 303-492-8308.

***SALT LAKE vs COWPIES.** Anyone in Salt Lake area who wants to have fun on National Day of Outrage Against Welfare Cowpies (1-14-89), contact Matthew, 485-5417.

***WINTER SOLSTICE CANYON RITUAL.** On the Winter Solstice this December, persons worried about threats to the Grand Canyon will meet at the Canyon Mine near the South Rim to conduct a ritual. Women spirits will form a serpent and coil around the mine. Men are invited too. For information, call Ilse at 602-778-6480.

Foreman and Sayen to Repeat Rowe Conference

Last January, Dave Foreman and Jamie Sayen conducted an Earth First! workshop at Rowe Conference Center in western Massachusetts which led to the formation of New England Earth First! and the Connecticut River Salmon

Revival Run. An overflow crowd of more than 50 people attended that weekend get-together.

Rowe Center has invited Dave and Jamie back to do another workshop this winter. It's scheduled for the weekend of January 27-29. Topics for discussion will include creative defense of natural diversity, big wilderness for New England, Deep Ecology and further organizing of New England Earth First!. This will be a prime opportunity for Earth First!ers in the Northeast to meet one another and develop plans for future campaigns. With a solid core of EF! activists already in place in New England, even more detailed plans can be made at this year's Rowe conference.

Rowe Center is a comfortable, yet rustic, facility high in the Berkshire Mountains of western Massachusetts, and features great vegetarian meals and good cross-country skiing. Contact Rowe Conference Center at Kings Highway Road, Rowe, MA 01367 (413)339-4216 for a copy of their brochure with full details on the center and how to register for the workshop. Don't delay in reserving a place at this year's Earth First! workshop. The conference center was completely filled last year with over a dozen people turned away.

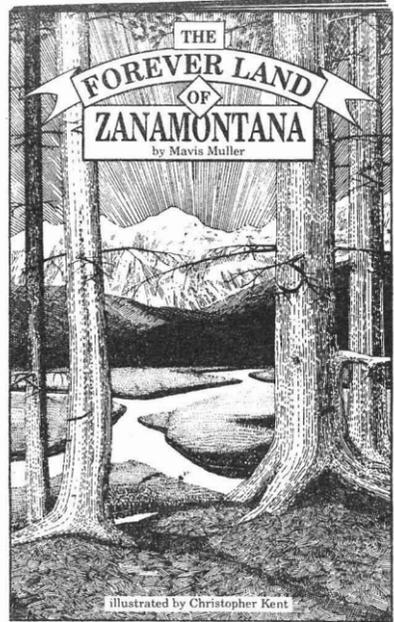
TEACH THE CHILDREN



EARTH FIRST!

COLORADO EARTH FIRST! T-SHIRTS
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Order from Colorado EF! c/o
10876 Victorian Dr.
Parker, CO 80134

THE FOREVER LAND OF ZANAMONTANA
by Mavis Muller



illustrated by Christopher Kent

A touching story by Mavis Müller with illustrations by Christopher Kent. This tale was written for children, to cultivate the deep ecology ethic of spirited people who magically become the wilderness in defense of itself; and written for adults to remind them that when believing souls unite to challenge the destroyers, miracles can happen.

To order this book, please send a \$5 check or money order to Zanamontana, P.O. Box 1520, Homer, Alaska 99603.

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1989 CAMPAIGN



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art by Lone Wolf Circles
Okanogan Highlands EF!
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Republic, WA 99166



NATIONAL GRIZZLY GROWERS
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Proceeds go to the Grizzly Task Force.
Gulf of Maine EF!
61 Maine Street
Brunswick, ME 04011

BATTLE BERRIES FROM THE NORTH RIM

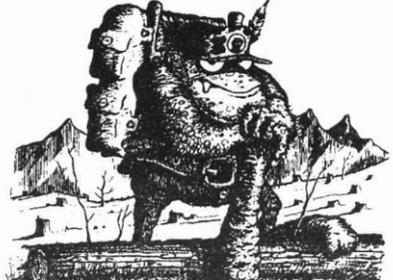


EARTH FIRST!

RR LIVE 1987

Earth First! music live and solar-powered from the North Rim of the Grand Canyon! 90-minute tape has selections from the 1987 RRR Patriots' Rally. \$11 postpaid. Send to: Andy Caffrey, c/o Oregon EF!, PO Box 1437, Merlin, OR 97532.

These advertisements offer merchandise which entirely benefit local Earth First! groups or other preservation groups deserving your support. Order directly from the address in each ad and not from this newspaper. These ads are placed free to support EF! local groups and other important groups.



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Protect Our Public Lands

by Lynn Jacobs

We Americans tend to get emotional about our national hero, the cowboy/rancher, and our national animal, the cow. These are inseparable parts of our romantic fantasy of the Old West. When told that livestock grazing has caused more damage to public lands than any other land use, many people insist that this just can't be true. Some become angry, as if they were being personally attacked. Let's put emotion aside briefly and look at the facts:

*Nearly 50% of the land area of the 11 western states is jointly owned by all Americans (Bureau of Land Management, US Forest Service, National Park Service, and US Fish and Wildlife Service lands), and 80% of it that can be grazed is grazed every year by private ranchers. [Actually the ranchers themselves don't generally graze; but their cattle, and in smaller numbers, sheep, do.]

*These "public grazing lands" produce only 2% of this country's livestock feed. *Only 23,000 private ranchers graze these 273,000,000 acres of public land — an average of 11,870 acres per permittee!

*These permittees pay \$1.54 per month to graze a cow and calf, in other words, \$1.54 per AUM (animal unit month). This is only 35% of the government's (taxpayers') cost to manage grazing on public land and only 25% of the cost of comparable grazing on private lands. Thus, public lands grazing is in effect *welfare ranching*.

*Indirect and hidden taxpayer costs of the public lands grazing industry approach \$1 billion annually.

*Public lands livestock grazing contributes only tiny percentages to local economies (rarely above 5%), even in the so-called "cow counties." If depleted natural resources, local government expenditures, and reduced income from other land uses are considered, public grazing *detracts* from most local economies.

*Livestock grazing competes with almost every other public use of Forest Service and BLM lands, including hiking, archaeological and Nature study, hunting, fishing, and camping.

*Livestock and associated "range improvements" have caused more extensive damage and more different kinds of damage to our public lands than any other land use.

*Indirectly or directly, public lands grazing has been responsible for the decimation or local extermination of dozens of species of wild plants and animals, including: native grasses, riparian plants; Desert Tortoise, New Mexico Ridgese Rattlesnake, Apache Trout, Lahontan Cutthroat Trout, Spikedace, Loach Minnow, Jaguar, Mountain Lion, Ocelot, Gray Wolf, Grizzly Bear, Black Bear, Bison, Elk, Pronghorn, Badger, Black-footed Ferret, Yuma Clapper Rail, Bald Eagle, Golden Eagle, and Peregrine Falcon.

*All this should be reason enough to get emotional! Now, consider a few arguments to further dispel the cowboy myth:

*The cow is not a romantic animal. [Even among those cattle never neutered, bovine courtship is an unseemly affair.] *Ranchers and cowboys, as a group, are dullards.

*Most of our Western ranching legacy (the great trail drives and such) has its roots in the Midwest and Texas, not the West.

*The great majority of today's cowboys are on private, not public, lands anyway. Only 14% of western forage is produced on public lands.

So, if we separate myth from reality, it becomes clear that we should not allow livestock on our public lands at all. Neither the economy nor our love of the Old West are sustained by welfare ranching.

The public lands grazing industry continues to cause destruction of native vegetation, massive soil erosion, lowering of water tables, depletion and contamination of springs, streams and other water sources, drastic reduction of wildlife habitat, elimination of predators, and "invasions" of pests and non-native vegetation. Our lands have been partitioned by hundreds of thousands of miles of barbed-wire fences and managed as livestock ranches.

For the last 100 years, welfare ranchers have exerted excessive political, economic, and social power throughout most of the rural West. It's time to admit

that commercial grazing on public lands was a mistake from the start. Steps should be taken to find other means of livelihood for the 23,000 welfare ranchers. There are many good alternatives, such as paying them to restore lands to a natural condition. The comparatively tiny amount of beef they produce would not even be missed.

Range improvements should be dismantled, range management programs terminated, and predators and competitors reintroduced. All commercial livestock should be permanently removed from our public lands.

Now consider what you can do to help end public lands livestock grazing:

*Write letters to editors of newspapers and magazines.

*Write, phone, or visit elected representatives and public officials, including the following:

The President, 1600 Pennsylvania Ave, NW, Washington, DC 20500; 202-456-1414
US senators, US Senate, Washington, DC 20510; 202-224-2115

US representatives, House of Representatives, DC 20515; 225-7000

Secretary of Interior, Dept of Interior, C St between 18th & 19th Sts, NW, DC 20240; 343-7351

Director of Bureau of Land Management, Interior Dept, DC 20252; 343-3801

Secretary of Dept of Agriculture, 14th St & Jefferson Dr, SW, DC 20250; 447-3631

Chief of Forest Service, USDA, POB 2417, DC 20013; 447-6661

Director of Fish & Wildlife Service, Interior Bldg, 18th and C Sts, NW, DC 20240; 343-4717

Director of Environmental Protection Agency, 401 M St, SW, DC 20460; 382-2090

*Contact state governors, senators, and representatives; western state land departments, other state agencies involved with public lands grazing; county commissioners.

*Contact conservation and public lands user organizations. Urge them to take firm anti-grazing stands. Contact livestock organizations and ask that they withdraw their support for public lands graziers; say that public graziers are private graziers' unfair competitors.

*Visit our public lands. Watch for overgrazing, overstocking, permit violations, and unauthorized developments. Report them to the appropriate agency and demand corrective action be taken.

*Contribute energy and money to organizations working to eliminate public lands livestock grazing.

*Eat less beef. Eating beef from any source is wasteful. Reducing our collective consumption of beef by only 2% would offset beef production on public lands.

*Boycott public lands raised meat. Though it's usually difficult to trace where

photo by Paul Hirt



Modern range management includes sensitive treatment of conflicts with predators.

a dead cow (or sheep) spent its life by the time it reaches supermarket shelves, it may be possible if you investigate. Tell people why you are boycotting.

*Distribute anti-grazing literature. Go to the agencies themselves (especially BLM and FS) and to employees in government offices. Or, for true adventure, pass out stop-grazing material at livestock association meetings.

*Organize a demonstration. Because public lands livestock grazing occurs in almost all parts of all western states, possible protest locations are limitless. Any BLM, Forest Service, or state land office is good; as are many offices of federal or state fish and game departments, pro-welfare-grazing politicians, Animal Damage Control, Animal and Plant Health Inspection Service, Soil Conservation Service, and county and state agricultural extensions; colleges of range science, agriculture, and natural resources; and livestock boards, agricultural committees, and stockmen's associations. Highly visible events, such as hearings, conferences, parades, rodeos, and county fairs, are among the best targets.

*Plan a non-violent direct action. Block a road or occupy a government office.

*Consider legal action. Over the years, various lawsuits concerning public lands grazing have been filed, mostly with limited success; but many legal avenues have yet to be explored. In fact, if existing environmental laws were strictly enforced, public lands livestock grazing operations would probably be shut down throughout most of the West! National Environmental Policy Act, Clean Water Act, Endangered Species Act, Federal Land

Policy and Management Act, Public Rangelands Improvement Act; agency failures to enforce grazing regulations, BLM and FS policy directives requiring resource protection, true multiple use, sustained yield, public participation in BLM land planning, fair market value for sale or lease of publicly owned resources, antiquated state open range laws, and deficit public lands grazing — all these afford opportunities for legal action. Public sentiment is beginning to turn away from the Imperial Graziers, and the courts will eventually have to uphold legal mandates.

*Take the bull by the horns. As a last resort, some environmentalists, hunters, fishers, animal rights activists, and others dismayed by the failure of legal methods to halt the destruction of our public lands and wildlife, have begun to sabotage the machinery, tools, and developments which enable the grazing industry to dominate our lands. These protesters cut fences; decommission destructive machinery; damage pumps, windmills, and stock tanks; dismantle corrals; close ranching roads; paint anti-grazing messages on livestock road signs; dispose of salt blocks; remove traps and poisons; and generally do their utmost to thwart public land abuse.

Free Our Public Lands!, the Earth First! grazing task force, is distributing a free 48-page tabloid on public lands livestock grazing. For this, for a list of other concerned people in your area, and for stickers and other help, write: Lynn Jacobs, Free Our Public Lands!, POB 5784, Tucson, AZ 85703; 602-578-3173.

Restoring Earth Kinship

by Michael J. Cohen, Ed.D.

At the beach last week, I tied up a dog to prevent it from chasing migrating shore birds. A clear plastic TV antenna cable, that I found amongst the beach debris, served well as the dog's tether — an unheralded spinoff from RCA and Zenith. The cable's transparency created an amazing illusion, for when I looked back at Fido from down the beach, the cable acted like an invisible bond preventing the hound from chasing wildlife. He ran toward a bird and suddenly, as if by magic, stopped in his tracks.

It was then that the frustrating efforts of educators, psychologists and group workers came into mind, because as they attempt to help people attain healthy personal, social, and environmental relationships, invisible bonds prevent this from happening, and these professionals must deal with this problem. Unfortunately, however, because they are modern people too, they know as little as we do regarding the nature and source of modern people's destructive bonds.

I only know about these bonds because their source exists in Nature, and while consistently living outdoors through all seasons for 15 years, Nature taught me how to recognize and respect them.

The invisible bonds I'm talking about are actually more than 25 different sen-

sations like hunger, suffocation, and thirst. They are our inborn affinities with Gaia, the living organism we call Earth. Gaia uses these intercommunicating affinities to organize, regulate, perpetuate and regenerate its life in the solar system. As our modern upbringing separates us from Gaia, it injures these survival bonds by tearing them and then joining their raw ends to our culture and its nature-destructive ways.

That is the underlying cause of most environmental, social, and personal stress. Although intellectually we see the hurtful results of our nature-alienated programming, modern society thwarts us from changing it by tabooing what remains of our emotional ties with Earth. We label such feelings as unscientific, anthropomorphic, immature, economically unsound, subjective.

It is our pervasive rejection of our remaining Earth kinship affinities that makes them invisible and therefore unreachable for ourselves and the professional educator or psychologist. For this reason, while our intelligence asks us to change, we remain painfully tethered to our environmentally destructive and self-destructive relationships. That's why most Americans identify with environmental causes but fail to support them.

In my book *How Nature Works, Regenerating Kinship With Planet Earth*

(reviewed in *Brigid 88 EF!*), I explain how living in the natural world showed me how to regenerate Earth kinship in myself and others. I show that *people's feelingful Earth kinship bonds are exactly the same affinity bonds that sustain all entities — from sub-atomic particles to weather systems*. That's why on every level, survival is an emotional issue and survival feelings always overcome apathy, but when bonded to environmental ignorance, cause chaos.

Over the past 20 years, I've developed many means for individuals to identify, reach and support their remaining Earth affinities. These techniques benefit people and the environment and are the core of the accredited, degree-granting National Audubon Society Expedition Institute. Once you know how, you can teach Earth kinship in school, at home, and in counseling settings.

I invite persons interested in regenerating Earth kinship to read *How Nature Works* (Stillpoint Publications; I've divested myself of any profits from book sales) and use its study guides. For this reason, while our intelligence asks us to change, we remain painfully tethered to our environmentally destructive and self-destructive relationships. That's why most Americans identify with environmental causes but fail to support them.

The Bionomics of Tree Planting

by Jeff Elliott

Reforestation through tree planting needs to be scrutinized by Earth First! and all ecologists. Walking a fresh clearcut does stimulate the perceived need to respond, and planting replacement trees seems a natural almsgiving. This essay addresses the question of whether the planting of trees is an appropriate action, or whether we are thus adding a second insult to a ravaged forest.

I live in the Northeast, and only rarely visit the West, thus I must extrapolate when considering that region. I hope the Hoedads and other tree planters of the West will read this with an open mind and respond to these heretical statements.

Forestry mismanagement is an expression of man's misinterpretation of an ecosystem. Mismanagement may be inappropriate exploitation for an economic reason, or it may be misguided altruistic attempts to "help" nature. We must be careful not to unwittingly become industry lackeys. Foresters are telling us that we can replace the forest by replacing trees. No! We replace only the trees, and, if we listen to the foresters, we replace them with the type of trees foresters want to harvest.

We should look closely at large-scale tree planting and see if it results in an ecologically sound forest, representative of the bioregion. Consider the semantics (and semantics) of conservation versus preservation, then reforestation compared to ecological restoration. What appear to be only subtle differences in terminology in practice become ecological blunders with long-term effects.

An example of this can be observed in the region adjacent to Mt. St. Helens. The eruption resulted in the so-called devastation of many square miles of timberland. This "mess" would have provided nurse logs for the rejuvenation of naturally occurring species, but the logs were dragged away for "wise use." The ashened soil needed these logs and their readily available nutrients. Then, rather than allowing natural pioneer species to begin the long process of succession, an economically valuable species was planted in neat rows like so much corn. The ecological disaster at Mt. St. Helens is not the natural life-giving layer of ash. It's the establishment of monoculture where before there was an ecosystem.

This is only one of countless sites where natural succession has been replaced with artificial selection. We should not rush or force succession for economic reasons. To do so is to fail to consider the needs of early succession.

Each phase of the healing process depends on the previous and is obligatory for the next. Each species lives and dies in a niche composed not only of its contemporaries but also its consolidated predecessors. This stepwise biological continuity is paramount to the development of microclimates and construction of soil which will lead to appropriate community maturation. We should not need to wrap the bases of young trees with plastic to protect them from the sun. These shade adapted species will become established when the appropriate successional stage is reached.

Most of New Hampshire's White Moun-

tains had been logged by the end of the last century. With no reseeded or replanting, hardwoods became established and grew for nearly 100 years before the aboriginal softwoods found the habitat they needed to flourish. In some areas softwood trees are now only as tall as a human. In 30 or 40 years these trees may become economically significant. It will be centuries before climax equilibrium is reached.

This process has taken place without replanting or artificial removal of brush. The practice (or need, for economic reasons) of removing brush from reforested areas is yet another example of why replanting may be inappropriate.

Natural eutrophication, by definition, provides a full complement of successional types. The removal of young hardwoods (referred to as "brush" - a forester's term to describe economic undesirables) is manipulation of the biome for profit. These hardwoods provide shade and habitat for wildlife. They assimilate nutrients and later, through leaf-drop and death, make them available to species of the next phase of forest eutrophication. This facilitates establishment of a healthy forest duff, and creates habitat for many interacting organisms essential for sustaining biodiversity. This interaction can eliminate the need for spraying pesticides through a natural system of integrated pest management (IPM) which is geared toward life - not killing; biogenesis rather than biocide. (The spraying of individual trees to enhance seedling survival and growth so clearly violates any responsible ecological ethic that it will not be treated here.)

By removing young hardwoods, foresters select for "good" and against "bad" varieties. The "good" are the trees of economic significance. But the "bad" plants may be required by indigenous species. An example is a species which acts as an obligatory host to another, as the American Beech (*Fagus grandifolia*) is related to the Beech Drop (*Epi-fagus virginiana*).

Environmental activists should realize that bad first aid is worse than no first aid. We need to discourage the economics of "conservation" forestry and bolster the natural healing process. We should not

fool ourselves into believing we can understand the intricacies of the ecosystem. A niche (Odam defines a niche as a multidimensional hypervolume) has far too many variables for us to fully understand.

The only replanting I condone is the reintroduction of species exterminated from a bioregion by man's interference. This should be done only when the proper successional interval is achieved. We must avoid planting climax species in a fresh clearcut.

If you replant roadways (as reforestation, not ecotage), you treat the symptom, not the illness. Such compacted soil needs tilling, not introduced species. For erosion control, construct water bars and use mulch. If plants are your only choice, use varieties that will not regenerate in your region, or use sterile polyploids. Later, visit the site to remove any that have become established. In regions where monocultures of university-developed varieties are allowed, push to have plantation managers use only sterile plants to prevent genetic alterations in adjacent buffer zones.

Clearcutting, of course, should be eliminated and strip cutting limited to bands no wider than the normal dispersal range of indigenous species. Rotation of strip cutting should be such as to allow for dispersal of successional species from adjacent transitional zones. This biological communication will allow the establishment of species at their natural points in succession.

Ecologists should embrace techniques that allow development of healthy soils properly horizoned with a profile which reflects the undisturbed (unexposed) soils of adjacent woodlands. Through succession, accumulated organic matter and organisms associated with humus development will construct soil that will best provide biodiversity. Through tree planting and associated activities, foresters arrest the development of forest duff and discourage mycorrhizal fungi, nematodes, soil microbes and other organisms obligatory to a healthy forest soil. Without these proper soil conditions and healthy subterranean communities, the trees cannot communicate with the earth. Each species depends on the trophic levels associated

with its own level. These trophic levels depend on stability and this stability is destroyed when reforestation upsets subsystem structures and community evolution.

Tree planting does not allow for the evolutionary experience necessary for the survival of an ecosystem. The homeostatic mechanisms which allow for rejuvenation are the result of evolutionary experience gained through succession, not anthropogenic pressures. The biodiversity of community organization is the multiplication of parallel structures which protect an ecosystem.

Techniques which improve biomass productivity but not the natural diversity of cut-over land should be limited to tree farms. Increases in tree farm productivity should thereby reduce the need for forest management on lands where natural ecosystems prevail.

Clearcuts are nasty scars and should be stopped, but as usual, humans had best let the wounds heal naturally. Secondary succession is much faster than primary succession, so even this generation can enjoy the results. We should expend our energy not on further insulting the land through tree planting, but in stopping clearcutting.

Jeff Elliott is a biology teacher who is active with EF!'s Preserve Appalachian Wilderness task force.

Restoration ecology and conservation biology are new fields filled with uncertainties and we encourage discussion in our pages on these subjects. Accordingly, we invite other conservation biologists to respond to Jeff's controversial article. -ed.



Local Group Newsletters . . .

Continued from page 21

frequently fed and therefore had learned to associate people with food, the Game Commission has been besieged with calls from people wanting alligators removed from near their homes. In the week following the "attack," game officials in the state's five regional offices received 849 separate complaints from citizens wanting alligators removed - about 5 times the normal load. A radio report quoted the Game Commission as promising it would remove any alligators over 5 feet in length that were perceived to pose a threat, i.e., any that live near where humans live, play, or work. Game officials have used the Nuisance Alligator Program to slaughter about 3000 gators each year; this year, the number killed surely will be larger. Press accounts invariably identify the cause of the problem as Florida's "rapidly growing alligator population" (AP). Reacting to the partial recovery of alligator populations in Florida, the Game Commission is opening a hunting season on gators this year, for the first time since 1962; about 230 licenses to kill gators will be issued.

The Game Commission, the press, and the ecologically illiterate public of Florida are seeing this problem backwards - they are forgetting who was here first. It is humans who are imposing on alligator habitat, not the other way around. It is humans, not alligators, who are exploding in population and pose a threat to other living things. Alligators have been around since the early Oligocene Epoch, some 35 million years ago; their crocodylian ancestors date back to the Triassic Period of 200 million years ago. Today, alligators, crocodiles, and their relatives are the sole surviving representatives of the Archosauria, the "Ruling Reptiles" that once included the dinosaurs and the

pterosaurs. In contrast, hominids (beginning with *Australopithecus*) have been around less than 5 million years, the genus *Homo* only 1.6 million years, and our own species, *Homo sapiens*, 400,000 years or less. Only in the last few thousand years have we alienated ourselves from Nature and mounted our blitzkrieg against the Earth. The alligator deserves our respect, not our "control," for existing so long at peace with the Earth. We should be careful around big gators, yes, but we cannot fault them for grabbing a dog or a human now and then, when we have invaded their habitat.

To help minimize human-wildlife conflicts, and to correct the injustice toward alligators and other wildlife, Florida EF! proposes a "Nuisance Human" program. Any humans caught harassing wildlife (which includes plants, fungi, and microbes), or disrupting natural habitat will be trapped and dispatched as humanely as possible. Modeling our program after the current (and, we hope, soon to be obsolete) Nuisance Alligator Program, we suggest that the meat of nuisance humans be sold to restaurants. Or better yet, it could be provided free to people on welfare, thus liberating those public assistance funds for acquisition of habitat for wildlife. Because customers might not order the meat under its real name, we suggest calling it something innocuous, perhaps "City Chicken" (just as "Rocky Mountain Oysters" is a euphemism for bull's testicles). Surely a Nuisance Human Program would be a "humanitarian" approach to the ever-increasing problem of humans encroaching on wildlife habitat.

Readers wishing to protest the Nuisance Alligator Program should write Col. Robert M. Brantly, Game and Fresh Water Fish Commission, 620 South Meridian, Tallahassee, FL 32399-1600.

-Wiregrass, the Florida EF! newsletter

The following is a directory of local and national EF! groups that put out something like a regular newsletter. For more information, contact these groups directly.

EF! DIRECT ACTION FUND
POB 210
Canyon, CA 94516

EF! RAINFOREST ACTION
POB 83
Canyon, CA 94516

EF! WOLF ACTION NETWORK
HCR 79
POB 1049
Crowley Reservoir, CA 93546

ARIZONA EARTH FIRST!
POB 3412
Tucson, AZ 85722

CHICO EARTH FIRST!
POB 5625
Chico, CA 95927

ACTION UPDATE
San Francisco Bay EF!
POB 210
Canyon, CA 94516

SANTA CRUZ EF!
POB 344
Santa Cruz, CA 95061

WALKABOUT
Colorado EF!
Box 1166
Boulder, CO 80306

WIREGRASS
Florida EF!
POB 13864
Gainesville, FL 32604

MIDWEST HEADWATERS EF!
POB 516
Stevens Point, WI 54481

CHICAGO EF!
POB 6424
Evanston, IL 60204

WILD ROCKIES EF! JOURNAL
Montana EF!, Wyoming EF!
Box 6151
Bozeman, MT 59715

NEW HAMPSHIRE EF!
POB 865
Lincoln, NH 03251

NEW MEXICO EARTH FIRST!
2405 Meadow Rd SW
Albuquerque, NM 87105

TEXAS EARTH FIRST!
POB 7292
University Station
Austin, TX 78713

WASHINGTON EARTH FIRST!
POB 2962
Bellingham, WA 98227



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ADDRESS!**

Out Of Weakness

Ed. note: The following is excerpted from the Epilogue of the book Out of Weakness: Healing the Wounds that Drive Us to War, by Andrew Bard Schmookler. The book is being published in September, 1988, by Bantam Books (666 Fifth Ave, NY, NY 10103; \$10.95 paperback, 21.95 hardcover). This sequel to Schmookler's The Parable of the Tribes (see review in Mabon 85) continues his important analysis of the sickness of modern civilization. While many EF'ers may consider his view of humankind overly sanguine, and may question his notion of a "biocivisphere," all should gain insights from his provocative inquiry into the human condition.

Chronic Condition

... 1. In a world where power rules, it is terrifying to be weak, for the weak are disregarded and destroyed. So we have separated ourselves from our real but unendurable condition as weak and vulnerable creatures; we posture as gods embodying the strength we worship; we cultivate narcissistic images of our own specialness, separating ourselves still further from our fellow human beings. In this world of fragmented humanity, competition not cooperation seems the essence of relationship, and security appears as a scarce commodity to be enjoyed by one at the expense of another.

2. Another aspect of power's reign has separated us still further from ourselves. Because the course of our civilized societies' runaway evolution has been dictated largely by forces indifferent to human needs, we have been compelled to internalize cultural demands that turn us against ourselves, teaching us to regard our nature as evil. To separate ourselves from the agony of the war we internalize, we separate ourselves from our own "evil" by discovering it instead out there, in those on the other side of the boundary.

3. The more dangerous the terrain, the more frightening it is to wander in it blind and disoriented. In a world where destruction lurks, therefore, we have felt an urgent need to believe our own "maps" infallible. We have consequently separated ourselves from our true experience of confusion and uncertainty, zealously making war on the unbelievers whose differences from ourselves call into question our possession of God's Truth.

Our destructiveness therefore is an outgrowth of a state of "sin" originating with the beginnings of history.

Such a perspective might seem, like the doctrine of original sin, to carry with it despair about our capacity to work our salvation. But it should not. For as chronic as our problem is by historical standards, yet in the perspective of our true origins it is but a recent crisis. Our story does not start with the beginnings of history, and in the larger evolutionary perspective it is not sin but wholeness that is our heritage.

In the Western world it was believed until recently that time began a mere six thousand years ago; and barely had it begun before we separated ourselves from paradise by eating of the tree that gives knowledge of the cleavage between good and evil. And, with the very first brothers, fratricide began. Such an image of time and of our inherent sinfulness fitted well a culture with no basis for seeing humankind separately from the civilized systems in whose toils we find ourselves ensnared.

During the past century and a half, new knowledge has made possible a wholly new understanding of our origins, and thus also of our nature. We now trace our ancestry back - not some six thousand years to the edge of civilization, but much further. Civilization, we now know, comprises but a tiny portion of the story of our species. Before civilization began, we lived as hunter-gatherers, whose societies apparently had little or no warfare (and it seems likely that such warfare as there may have been was of a wholly different nature from what we know as war - more ceremonial display than actual destruction). But our origins go back much further than that. Even Lucy, the famous hominid whose several-million-year-old skeleton was uncovered in Africa, is not one of our early ancestors. Our ancestry goes all the way back, to the reptiles, to the fish, to the one-celled creatures in the seas where life began. The intellectual revolution begun by Darwin shows that the ten thousand years we call history is Page 26 Earth First! November 1, 1988

but a tiny period at the end of a shelf-ful of volumes of the story of life on earth. And the story told in all those volumes, and not just the period at the end, comprises our story.

To know what in our condition is "chronic," therefore, and what is acute, it is important to understand the nature of the evolutionary process from which, after almost four billion years, our species has emerged.

Ancient Synergy

What is the salient characteristic of the evolutionary process? It is the knitting together of ever-larger wholes of ever-increasing harmony....

[I]ndeed, it may be that even the beginning of life does not mark the origins of this impetus toward the assembling of ever more complex and harmonious wholes. Since the very beginning of time, the very matter of the cosmos seems to have been unfolding in a similar direction.

According to the scenarios of cosmic history that cosmologists now find most consistent with the evidence, the universe began some sixteen billion years ago with the Big Bang. In the very first instants of the universe's existence, because of the enormous temperature and pressure, matter could exist only as discrete quarks and leptons. The quarks then assembled into integrated structures, creating the subatomic particles like protons and neutrons. Then began the evolution of the elements starting with the simplest - hydrogen, which still comprises most of the mass of the universe - and then helium. As the process of fusion continued, in the crucible of the interior of the stars, heavier elements formed from hydrogen and helium. In her book *The Unfinished Universe*, Louise B Young traces this process through the assembling of atoms into molecules, even up to the extremely complex organic molecules that are the precursors of life, and on into the evolution of life itself. There is, she says, "a natural tendency for self-organized wholes to form." The whole cosmos is composed of "organisms" in this sense of self-regulating units that maintain stability and even regenerate themselves when fractured. Young quotes the famous scientific philosopher Alfred North Whitehead: "Biology is the study of larger organisms; whereas physics is the study of the smaller organisms."

Looking at the course of sixteen billion years of cosmic evolution, Young concludes: "With the elapse of time Form has increased." By "Form" she means the sum of those assemblies of matter that "exhibit the characteristics associated with wholeness."

Our very existence, on a moment-to-moment basis, rests on wholeness more elaborate and more profound than we can comprehend. At the macro level (in terms of the earth), there is the intricate harmony of the biosphere. At the micro level, there is the organization of matter to create our bodies. "A single gene is constructed of at least a hundred thousand atoms; each chromosome contains somewhere between two thousand and twenty thousand genes; each species carries a characteristic number of chromosomes - from two to several hundred." This incredible complexity is coiled into the nucleus of every cell in our bodies. Each cell is by itself a small universe; each cell is an organism of a complexity that can boggle our minds. And each of us is a cosmos composed of a trillion such microcosms.

And those minds of ours, thus bogged, are founded upon what may be up to 10 to the 17th power interconnections among the neurons in our brains (that is 100,000 times as many as a million million)....

An Unprecedented Disruption

The breakthrough made by our species into a new kind of living system - civilization - has (at least) temporarily upset the wholeness that has been growing upon this planet. Civilization, so far, constitutes an unprecedented threat to the viability of the biosphere. What is unprecedented is not the disruption per se, but rather the nature of the source.

The evolution of life on earth has encountered crises before. Previous crises have apparently been precipitated by developments originating outside the living system. Life's control of the terrestrial environment, although considerable, has been incomplete. Thus, the floating of the continents upon the earth's crust could lead to a sudden joining of two previously separate biological communities when

North and South America met, and the result was a wave of extinctions (primarily among South American fauna). The harmonies of living systems emerge through extensive interaction through time. A sudden meeting of organisms that have had no time to evolve a synergistic pattern is likely to be destructive, as in the sudden encounter between the American chestnut and the virus from China. Another, still greater cataclysm originating outside the biosphere is thought to explain the disappearance of the dinosaurs: the collision with the earth of a huge meteor, it is now believed, so upset the earth's climatic patterns for a while that the dominant dinosaurs were wiped out. So also with the extinctions that have accompanied the coming and recession of the Ice Ages, caused perhaps by solar fluctuations well beyond the reach of the living system to regulate.

The current crisis in the evolutionary process is unprecedented because it emerges from the living system itself. We are the first of earth's children to threaten our mother. An extension of the biological process into civilization has spread deserts where there was green life, and now is extinguishing species of plants and animals at an alarming and accelerating rate. All this even without our using our growing stockpiles of weapons of destruction, weapons that could inflict grave injury upon the biosphere as a whole. Out of the harmony of biological systems has emerged a creature destructive of the natural foundation of its own existence, out of harmony with its own nature, and at war with its own kind.

The fall from wholeness into sin is the consequence of our inadvertent plunge out of order into anarchy. The human capacity for creativity that developed as an adaptive strategy for life within the regime of nature eventually took us out of that order into an unprecedented - and therefore disordered - situation. The evolutionary process, evidently, cannot look forward. In our case, the innovation in our cortical structure eventually led life into a new game, civilization. But the old game - biological life - is a continuing prerequisite of the new, and its requirements must still be met. The disorder of the new system undermines the integrity of the old.

Order takes time to create. What is suddenly introduced into a living system will be, at the outset, out of harmony with the rest of the system. This is true of that sudden invasion of South America by North American fauna; and it is true of civilization's precipitous emergence into the biosphere. But the case of civilization is different from the other. The fauna of North and South America could, in time, come to an accommodation of a familiar kind: an ecological balance in a biologically governed order. But civilization has carried cosmic evolution to a new stage, to what Jonas Salk calls the "metabiological" level. The discord it introduces is extraordinary in nature, and the restitution of wholeness will also have to be an extraordinary level. The floating of the continents produced what might be called a regressive crisis, for it represented the intrusion of forces from an earlier level of cosmic evolution (i.e., the nonliving systems). Civilization has produced a progressive crisis, a disorder caused by the sudden emergence of a new kind of order - that created by the creative spirit of a living creature.

The progressive crisis caused by the emergence of civilization creates a new kind of problem, and further evolution along this line of life's development will require a new kind of solution. The new phase of evolution that is engendered by the creative spirit can be described in terms of the spirit. The disorder and damage we unleash we may speak of in terms of the notion of sin. The encompassing Whole we are challenged to create at a new level may have something to do with God.

Alignment in Evolutionary Architecture

We human beings are carriers of sin because we are pulled apart by two evolutionary processes: the one that created us, and the one of which we inadvertently became the creators. We are of divided allegiance, separated from ourselves by the conflicting pulls of the nature within us and the runaway cultures evolving around us. Unlike the jaguars seeking a niche in South America or the giant sloth falling

out of its place in the jungle, we are the "sick animals."

Our being out of kilter with our environment is more dangerous than the jaguar's because conception in the mind is far less conservative than conception in the body. That is, with our creativity we can quickly - in the space of a few millennia - amass powers orders of magnitude larger than those embodied in the flesh. We become powerful before we become safe. In purely biological evolution, change is slow enough that new forms do not become general unless they work: no creature can win against its environment for long. Biological evolution may not look forward, but it discards what is not harmonious with its environment before it rules the planet.

But, again, the old game continues. No new level of organization can survive unless it conforms to the rules governing the levels below it. The evolutionary process works toward the creation of wholeness, balanced harmonies stacked up from the lowest to the highest levels. It should not be surprising that a sudden eruption would create disruption. But the evidence of cosmic evolution suggests that we will not long continue in our disharmonious state. The wage of sin is indeed death. Civilization must repent - creating an order in harmony with all the orders below - or it is damned.

The way of repentance is the way of shalom, of knitting together at all the levels not now at peace with one another. The natural wholeness of life must be reestablished....

Only the creation of a new, overarching order that fosters harmony and wholeness will enable the members of humankind to become whole. (Overcoming the structural fragmentation of our macrosystems is required to make the world safe for the consciousness that transcends boundary.) And only when the human elements of the system are whole can the greater Whole we need to create be established. (It is not sick cells but healthy cells that comprise a healthy body.)

Wholeness Built on Consciousness:

The Bio-Civisphere

This new wholeness will emulate the ancient wholeness from which we arose, but it is a new kind of wholeness. This new whole might be called the "bio-civisphere." Like the biosphere that evolved by wholly biological means, the bio-civisphere will embody the harmonizing of relationships and the cycling of resources that safeguard the system's stability and long-term viability. But unlike the biosphere, it must incorporate the new dimension of consciousness into a central place in its harmonious order.

Consciousness - a creative capacity for awareness and choice that transcends genetic programming - is what lifted our species out of nature into civilization. Fragmented civilization has engendered a sick consciousness - in its cognitive, emotional, and spiritual dimensions. The whole civilization of the bio-civisphere will require a consciousness of a very different sort, a consciousness that is the expression of the harmony and integration that characterized the system of life before civilization.

The bio-civisphere, therefore, is like a biosphere governed by consciousness. Above all, the consciousness that is required to carry the evolutionary process forward to the new level of the bio-civisphere will be characterized by the spirit of shalom. As the problem of war is the most profound image of the destructiveness that we have introduced, through civilization, into the living system, so does our working for peace appear as the specifically human challenge in life's evolutionary unfolding. We, the animals whose creative minds have unleashed a time of division and destruction, are called upon for our very survival to align our consciousness with a new kind of wholeness.

In this work, we have explored both the consciousness that divides and leads to war and that which can bring humankind together....

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ON BECOMING *HOMO LUDENS*

by Christoph Manes

The use of science to explain social practices is usually suspect. Not because human behavior transcends the natural processes science purports to describe, but rather because science itself is suspect, with unsavory links to institutional power. I needn't recite the litany of Lysenko in Russia, Rosenberg in Germany or genetic engineers in modern America to prove the point.

Nevertheless, the 10,000-year-old environmental crisis is an enigma that inevitably raises questions about human evolution, especially concerning language, social organization and intelligence.

The fashionable view is that humanity's disruption of the environment is somehow (we know not how) "natural," since by definition we evolved into the kind of rapacious animals we are. But this type of thinking confuses history with nature. There is nothing necessary about agriculture, the state, or industrialism to human existence. Some societies developed these social forms; others did not. In attempting to resist the "civilization complex" that now threatens this planet, we are compelled to ask why. To that end, examining social practices in light of natural processes is a legitimate area of inquiry.

This article puts forth the following thesis:

1. Rather than being the "pinnacle of evolution," human intelligence is simply one strategy for survival among millions of others honed by natural selection.
2. Indeed, some aspects of human intelligence, such as categorization, problem-solving, and goal-orientation, are maladaptive, and their cumulative result — civilization — threatens to make *Homo sapiens*, like the Giant Glyptodont, a dead-end species.
3. However, as primal cultures prove, these maladaptions can (and must) be resisted.

THE PRIVILEGING OF REASON

To begin, we need to place human intelligence in its evolutionary context. This means dispelling the myth that intelligence is an exclusively human trait.

Intelligence, like protective coloring, is merely one technique for survival in the vast repertory life has developed over 3.5 billion years of organic evolution. It occurs in all genera, from octopi to Galapagos finches. The fact that human survival depends on intelligence rather than fleetness of foot or poison fangs in no way makes it the "aim" of evolution. Evolution has no aim — except, perhaps, to paraphrase JBS Haldane, an inordinate fondness for beetles.

But human survival and the civilization complex behind the environmental crisis are two different things. Through natural selections, sophisticated patterns of thought became the major technique by which humans survived. We abandoned almost all other strategies, just as turtles relinquished their reptilian agility for protective shells. What role, then, does intelligence play in the rise of civilization?

Intelligence is not monolithic. When researchers in cognitive science, such as Allen Newell or Robert Socal, speak of intelligence, they do so in terms of categorization, information-processing, problem-solving, and goal-orientation. Traditionally, these elements have been grouped under the concept of "reason." There are, of course, other elements to intelligence: curiosity, play, imagination, a sense of beauty and form — traits we share with many other animal species. But reason and its constituent parts came to dominate human noetics.

In fact, at the origin of Western anthropocentrism in Greek thought, reason became the single characteristic distinguishing humans from animals. Man is defined as *zoion logon echon*, the rational animal. It is by virtue of his reason, so states the myth, that man stands at the summit of the natural order. Anthropocentrism and logocentrism go hand in hand.

In an ironic sense, the myth is correct. Problem-solving, information-processing, goal-seeking — the purposeful thinking of reason — play a central role in the rise of civilization and, hence, the fiction of "Man" as an entity ontologically distinct from nature.

Civilization requires this distinction. If we look at the "surface" of civilization instead of searching for some hidden causation, we always see the same process: the

accumulation of power. But civilization always has an alibi to explain away this process. It produces a rich discourse about progress, or the divine right of kings, or Truth, Justice and the American Way. To achieve its goals, civilization invokes all the mechanisms of reason. In essence, to gloss over the process of power accumulation, civilization makes existence into a "problem" to be "solved" by the application of reason possessed by an ontological fiction called "Man."

For example, the Ur-myth of civilization, agriculture, is embedded in the discourse of increased prosperity, leisure time and health. These "benefits" came at a cost, of course: the rise of the first political tyrannies. Moreover, on closer examination, even the supposed benefits of agriculture prove to be fictitious. Professors Mark Cohen and George Armelagos have made extensive paleopathological studies of the rise of agriculture, concluding that it was the source of famine, malnutrition and the spread of parasites and infectious diseases. Skeletons from Greece and Turkey, for instance, show that average height decreased as these regions shifted from hunter-gathering to agriculture. Across the ocean in Pre-Columbian America, the introduction of maize farming was accompanied by a 50% increase in enamel defects indicative of malnutrition, a four-fold increase in iron-deficiency anemia, and an increase in spinal degeneration reflecting hard physical labor. As one might expect, skeletons from the royal tombs at Mycenae are taller and have fewer dental flaws than those of the Bronze Age laborers who worked the fields.

After the pastoral facade of agriculture falls from view, all that is left is the ceaseless accumulation of power by various groups.

The association of reason, civilization and the environmental crisis is, to my mind, indisputable. What is not clear is how reason, a trait produced by natural selection, could become a threat to our survival through the increasing power of civilization. And why reason? Why not the other elements of intelligence, the noetics of play, aesthetics and imagination?

THE LIMITS OF NATURAL SELECTION

Traditionally, the noetics of play are associated with childhood and adolescence, while reason comes into its own with maturity. Medieval philosophy, for instance, divided human development into septiads, or seven year periods, with reason acquired in the third septiad (which is why 21 is still drinking age in many US states). Modern research, and common sense, corroborate the view that reasoning power increases with age.

This is a key point since the mechanisms of evolution depend very much on age — specifically, reproductive age. Natural selection drives the evolution of populations only up to the point where individuals produce viable offspring. (This includes the period during which offspring are dependent on their parents.) After genetic material is passed on to the next generation, the sifting and winnowing of natural selection may make a difference to the individual, but to evolution it is irrelevant. We tend to forget this in the language of "survival of the fittest" and the "struggle for survival," but what survives are genes good at reproducing themselves, not strong, long-lived individuals.

There is no evolutionary mechanism determining the development of individuals after they reproduce viable offspring. Members of the genus *Ephemera*, such as mayflies, perish immediately after reproducing. Male mantises and Black Widow Spiders are often devoured by their mates upon performing their nuptial duties. Among humans, wisdom teeth have been an affliction for 30,000 years, and probably will be for 30,000 more, since the gene is always passed on before its expression can cause malocclusions hindering survival later in life.

Beyond the limits of natural selection, even more exaggerated traits can be expressed. Some phenotypes increase the chances of survival to reproductive age only at the expense of survival past that age. For example, mammoth tusks tend to curve inward, so much so in older individuals that the tips would actually cross like a pair of misaligned calipers. For years, paleontologists attempted to explain this maladaptation. Naturalist

Richard Carrington offered the simplest explanation by noting that younger bulls would have had full use of the tusks to defend themselves and win females. After reproductive age, the tusks continued growing until the formidable weapons of youth became useless burdens in old age. There was no mechanism to stop this hypertrophism since natural selection favors genes that produce viable offspring, not well-fed elderly mammoths. (The same evolutionary dynamic, in a less spectacular form, affects modern elephants. The tusks of a bull African Elephant are necessary for it to survive and reproduce. However, older bulls can be weighted down by their magnificent ivory.)

For lack of a better term, we can give this process the pompous name, "hypertrophic drive."

THE HYPERTROPHISM OF REASON

Is it possible that hypertrophic drive is at work in the development of human intelligence? There are striking similarities between human reason and other hypertrophic traits. All the elements of intelligence help humans survive to reproduce and raise their children. However, reason has the peculiar property of continuing to develop as we grow older. Numerous studies have shown that, with experience, people not only become better at solving a particular problem, but better at problem-solving in general.

Furthermore, reason is able to amplify its problem-solving capacities beyond individual experience by means of culture. Reason constructs social structures and institutions that store information and problem-solving techniques. These include not only tangible forms like libraries and schools, but more subtle forms like customs, attitudes and norms that encourage the development of reason in individuals to the exclusion of other modes of thought. The hypertrophism of reason finally reaches its height as one culture assimilates problem-solving techniques from other cultures dominated by reason.

If true, this assessment of human intelligence gives a new perspective on the origin of civilization. Rather than being the high point of evolution, civilization dwells at the fringes of natural selection, a kind of unpleasant genetic by-product, like cellulite.

RESISTING REASON

The hypertrophic drive thesis also invites us to reappraise primal cultures. If primal cultures avoided the civilization complex, it must be because they developed techniques to forestall the domination of reason over the noetics of play. Might it be that primal cultures used myth and ritual to prevent reason from its uncontrolled growth after reproductive age?

The meaning of ritual, in particular, remains elusive to traditional anthropology. In general, anthropology has sought some hidden (psychological) or transcendent (structural) source for primal and modern



not very close examination is necessary

curiosity play imagination, and a sense of beauty and form are not unreasonable but that is, they are not opposite to reason but orthogonal to, at right angles to reason.

Hypertrophic growth beyond normal size. an outsize of an organ.

begin to search for the beauty, imagination, and play in reason.

rituals. Perhaps, however, the meaning lies on the surface. Modern rituals, such as military parades and court proceedings, encourage and privilege reason; in contrast, primal rituals, such as rites of passage and spirit journeys, discount reason and place it in a context where its problem-solving regime is irrelevant. The use of hallucinogenic drugs often associated with primal rituals supports this interpretation.

Similarly, the disjunction between modern and primal myths may also be due to a difference in function. The modern myth of progress, for instance, reflects the categorization and problem-solving on which civilization depends. In contrast, primal myths about trickster deities such as Coyote, Raven and Loki seem to undercut the entire reasoning process. It probably is no coincidence that trickster deities are often involved in creation myths, bestowing gifts (mostly unwittingly) indispensable to a sustainable human community.

Trickster deities are central to the understanding of primal religion. They stand in the same relationship to the respectable gods as play does to reason. Without a trickster god, the (usually) male, authoritarian, and rational, central gods are taken too seriously — witness Jehovah. In fact, one can probably distinguish in the duplicitous Lucifer the distorted figure of some ancient Hebrew trickster divinity banished from the dreary empires that were taking root on the alluvial plains of the Near East at the close of the Paleo lithic.

Finally, the hypertrophic drive thesis underscores the need to rediscover a noetics of play. If the hypertrophism of reason is at the heart of the environmental crisis, the application of more problem-solving techniques is not the answer. Rather we need to stop taking reason seriously as a path to truth, and see it as a strategy of survival that has become as onerous and convoluted as a mammoth tusk. Humanity has taken itself very seriously for the past 10,000 years. Perhaps we now need to leave *Homo sapiens* — the sagacious human — behind, and begin the bumbling, halting, drunken, joking, delirious journey to *Homo ludens*: the playful human.

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Christoph Manes is a Norse literature scholar, a philosopher, a future environmental lawyer, and one of our most unreasonable essayists.

Does this evaluation of civilization apply, not also to the "noetics of play", and with equal force if of play were elevated?

Stalking Home

FALLING LEAVES

All this you surely will see, and much more, if you are prepared to see it - if you look for it.

-Henry David Thoreau

One of North America's most rare and unusual cone-bearing trees is easy to locate when autumn stalks the high mountains. The alpine larch (*Larix lyallii*) lives sprinkled across the inland ranges of the northwest from the eastern Cascades to the spine of the northern Rockies. It rarely grows below 6000 feet. Botanists know it as a physiological wonder - the tree most adept at high altitude survival. It is also one of the few conifers that sheds its leaves every fall.

I have learned to seek the larch when it is colored gold in October. The leaves glow with an inner fire before they drop to the ground like scattered bronze pins. High in the Bitterroot border peaks of Montana and Idaho, in the headwaters of the Blackfoot River hard against the Continental Divide, and at Cutthroat Pass in the North Cascades, under the gleaming eye of Glacier Peak, these bright leaves have helped me discern the ecological patterns of tree growth at timberline.

Colored leaves are the external gifts of autumn to the natural historian. They are outward signs of the inward grace of seasonal biochemistry. This internal story, subtle, hidden from view, is yet available to those who wish to know it. One must slip through small leaf pores, stomata, to witness the full death of leaves.

Deciduous plants shed their leaves each fall to avoid the energy drain of winter cold. In the temperate bioregions of the world it is more efficient for most plants to lose the ability to make food through photosynthesis than to expose their thin, water-rich leaves to freezing temperatures. Cell walls and membranes cannot withstand the destruction that results when water freezes and expands inside the leaf. Needleleaf evergreen plants have a lowered cell water content during winter. And because of narrow shape, thick waxy coatings, and rigid cell walls, they are able to survive winter without adopting a deciduous lifestyle.

Deciduous dormancy is an elegant, gradual process. It is not a simple winter resting stage. Beginning in late summer, a series of active metabolic events is set in motion that changes cell structures and culminates in leaf drop.

As days grow shorter, hormones that stimulate growth decrease inside plants. Proteins are synthesized to form new growth-slowing hormones and enzymes. As these elements increase, chlorophylls begin to break down. Leaf cell proteins are unbound into their nitrogen-based building blocks. This nitrogen is removed from the leaf and used by other parts of the plant. In fact, much of the energy that fuels the active breakdown of leaves comes from the products of the breakdown itself. Little of the stored energy of the leaf is wasted, even as it is being

transformed.

Leaves do not drop just because they are dead. Without abscisic acid (ABA) they might remain on branches all winter. ABA is produced in leaves and seeds. It stimulates the fascinating set of events that botanists call abscission and lay people call turning and falling leaves.

Abscission is both chemical and structural. As ABA builds up in leaves, cells divide, enzymes are made, and the internal geography of the leaf changes to accommodate winter. Before a leaf may fall, its connections with the rest of the plant must be severed and blocked off. Where each leaf joins a twig, two layers of new tissue arise. The outer, protective layer is composed of newly made fats called suberins. Suberins gum up the spaces within and between cells, effectively sealing off what is to become a wound when the leaf falls off the branch. The resulting odd-shaped leaf scars, familiar to all students of woody plants in winter, are grinning talismans of the chemistry of self-healing.

The abscission layer is immediately interior to the protective layer. Here, ABA stimulates the production of ethylene, a gas that also is produced by fruits. (When you place green bananas in a paper bag, you trap the ethylene that is produced by the fruit which then speeds the ripening process.) As ethylene concentrations build, pectinase and cellulase are formed in the abscission layer. In a beautiful illustration of positive feedback, these enzymes, in turn, stimulate the production of more ethylene. Pectinase and cellulase devour cell walls and the tissues that connect the leaf with the plumbing system of the plant. The leaf's hold on the twig is weakened. Once these connections are dissolved, wound gums called tyloses plug the tubes. Layers of corky cells finish the task of sealing. It is now simply a matter of time and wind before the leaf joins the ground.

Some deciduous species hold on to their leaves all winter. The oaks (*Quercus* spp.) and beeches (*Fagus* spp.) of eastern bioregions are well-known for this. These genera do not form abscission zones. The winter wind sings tattered songs all through the shortest days of the year in oak and beech woods. By late winter, the elements have stripped most of these papery wind chimes off their branches.

As abscission proceeds, the green color of the leaf fades. Other resident pigments, previously masked by the abundance of chlorophylls, are revealed. This is the painting of the autumn forests. There are two major groups of non-green pigments in leaves. Blues and reds come from anthocyanins which are found in the sap of leaf cells. The soft purples of white ash (*Fraxinus americana*) and some species of *Viburnum* result from these. Carotenoids form the red/orange end of the spectrum. These pigments are found in chloroplasts, the cell bodies that house photosynthesis. Wine-colored sweet gum trees (*Liquidambar styraciflua*), flame maples (*Acer* spp.), and the gold leaf-coins of aspens (*Populus* spp.) are painted by carotenoids. (Carrots and tomatos gain

color from the same source.) In autumn, the world is no longer locked in a tyranny of green.

Botanists have not yet fully deciphered the signals that set off dormancy and the work of ABA. The onset of senescence is clearly tied into the turning seasons and shortening days. How plants perceive photoperiod, the relative amount of dark and light, is still a mystery. These seasonal shifts trigger the production of ABA. Cold weather speeds up the process - plants adjust to the conditions of a given year. And to break dormancy, in late winter most plants require more than lengthening days and warming temperatures. They also need to have weathered 250-1000 hours of cold before growth hormones can begin to build. This requirement keeps buds from bursting during a February warm spell.

All things must pass. Wild spirit moves and we must be quick to follow. Thoreau believed that autumn "required a particular alertness if not devotion." Years ago



THE GRIZZLY DEN

by Howie Wolke

makes the journey a bit easier. Excessive baggage, though, makes the trip more difficult. Traveling light allows one to focus on one's destination.

After my speech at the 1988 RRR, several Earth First!ers expressed disagreement with a couple of the key points that I attempted to make. Here I'll clarify those points.

First, I said that the use of pseudonyms within the Earth First! movement detracts from the power of our message. It detracts from our power not only in the *Earth First! Journal*, but in news releases, interviews, demonstrations and various other EF! activities.

That said, some folks may recall that at the Round River Rendezvous I also admitted that there are certain situations in which the use of pseudonyms is necessary and proper. Such situations include the publishing of articles that might threaten the author's livelihood, of obviously humorous articles, and of articles by individuals wanted by the FBI, CIA, KGB, or, worse, Barbara Bush. In addition, there are some situations in which effective mainstream environmentalists (yes, there are a few of them) wish to contribute to the EF! movement without blowing their cover.

In this light, I do not believe that everyone in Earth First! who uses a pseudonym is "hiding" behind it, lacking the courage to stand up for her or his convictions. To the contrary, there are very few situations in which that is the case. After my RRR speech, a Montana activist defensively stated that he wasn't hiding behind his alias, and that even with his alias, everyone in EF! knew who he was anyway. But the ubiquitous use of pseudonyms in the *Journal* and elsewhere within the EF! movement makes it appear as though many EF!ers lack the courage to openly advocate positions and beliefs that are "extremist" according to conventional thinking. Does how we appear to the outside world matter? You bet your sweet fucking ass it does! Because unless we simply enjoy intellectual masturbation among ourselves, we'd damn well better consider how to best get our message across to others.

As I see it, part of the problem is that we EF!ers are a clever bunch. Some of the pseudonyms are damn clever, and I chuckle at many of them. So I'll repeat: I'm not against all pseudonyms, and I still believe that EF! must retain its sense of humor; I'd simply like to see a reduction in the extent of their use in the EF! movement. I suggest that before one is used, the EF!er ask him/herself a few basic questions: Is it necessary? Will I be thrown in jail if I use my real name? Will using my name reduce my effectiveness on an important issue on which I'm publicly representing a mainstream wilderness group? Is my article primarily humorous or satirical? If the answers to these questions are no, then I suggest they use their real names. (There may be other special circumstances which my overburdened, alcohol depleted mind has neglected.)

The second subject upon which I managed to offend some good folk at the Rendezvous concerned baggage. Yes, John, carrying a little baggage sometimes

Over the years, we in EF! have often advocated tolerance for a wide array of beliefs and values within our ranks. The only thing that really matters, we're fond of saying, is our common belief in the Earth first. This human diversity within our movement is indeed a positive thing. The inclusion in the *Journal* of articles which touch on subjects perhaps only indirectly relating to wilderness and biodiversity (such as anarchy or the sanctuary movement) is fine, to some extent. The problem arises either when individuals in the movement refuse to accept or work with others who aren't "politically correct" according to their definition of proper political thought, or when supporters of various causes divert attention from the main focus of our efforts. Does this mean I'm willing to work on a wilderness issue with someone whom I might consider to be, for example, somewhat racist? If it might help to save the wilderness, you bet! Does it mean that I'd be willing to trash a bulldozer with a George Bush supporter? Hell, yes! Must a cohort share my support for the peace movement or my hope for worldwide economic collapse in order to help me stop a timber sale? Hell, no!

Racial and sexual discrimination, human rights, religion, foreign policy, lifestyle, diet (vegetarians vs. omnivores) and a host of other issues are important, and do have serious ramifications for the health and survival of diverse life on Earth. But in the *Journal* and elsewhere in EF!, any discussion or inclusion of issues such as these should be subservient to the real focus of our movement: wilderness, biodiversity, planetary survival. That's what I mean when I advocate tolerance. We must be tolerant enough of others to set our baggage aside for our common goal.

Speaking of baggage, one piece I'd like to entirely eliminate (Dave and I argued about this when preparing the first issues of *EF!*, back in 1980) is the Pagan names on the *Journal* masthead. I speak English (arguably so, at least) and long for the day when I'll be able to pronounce the names of *Journal* issues. (Names like "Winter Solstice," "Spring Equinox," and "Midsummer" would be wonderful!) Furthermore, many of us do not consider ourselves "Pagans." Many potential supporters are put off by the *Journal's* apparent subscription to Paganism. One can (and I, for one, do) worship and defend our planet without calling oneself a Pagan or, for that matter, without subscribing to any religion or political system ending with the suffix 'ism.' Again, I can even tolerate Christians and Republicans who want to put forth effort to save the Earth, even though, to me, it's difficult to reconcile those two value systems with saving our beleaguered planet. But that's my belief; it doesn't have to be everyone's.

So that's it. Baggage and tolerance. You got it right, Miguel; Howie Wolke is preaching tolerance. What is the world coming to?



by Margaret O'nderson

The Osage



SACRED LAND SACRED SEX: RAPTURE OF THE DEEP, Dolores LaChapelle, 1988, 383pp., 47pp. references, \$22 plus 1.60 postage from Way of the Mountain Learning Center (Box 542, Silverton, CO 81433); available also from EF! Books.

"Everything is interconnected." Such a statement has become so commonplace in environmental discourse as to be a veritable truism... but one seldom truly perceived, nonetheless. Dolores LaChapelle's new and encyclopedic book reveals the connections and lends meaning to such a statement. In exploring humanity's alienation from nature and ways to heal the rift, Dolores has, per force, delved into and expounded upon an immense and disparate assortment of topics. On reading *Sacred Land Sacred Sex*, one is made aware of the connections not only by the compelling way in which Dolores explains the connections, but also by the very breadth of this book. To adapt a famous line by John Muir, Dolores, in seeking to unravel one major strand in Earth's history, found it inextricably linked with all others. Thus we learn from her book how factors as diverse as AIDS, alphabets, bears, drugs, endorphins, garbage piles, gold, gourds, Mongols, and sugar all have played and/or are playing major roles in shaping humanity's relation with the natural world.

Sacred Land Sacred Sex is the book which so many deep ecology advocates have been anxiously awaiting since reading Dolores' previous and extremely important books, *Earth Festivals* and *Earth Wisdom*. It is, in essence, a summary of the rise and fall of Western Civilization; a comparison of Western Civilization with Chinese civilization, New World native cultures, and pre-Western cultures; and a guide for those seeking to reconnect. While much of the book covers history, its aim is altogether current. Dolores seeks with this book to accomplish what she began in her previous books — to facilitate the reintegration of *Homo sapiens* into nature. Given its immense depth and breadth, I shall not be so presumptuous as to attempt to provide a synopsis of it here, but shall simply highlight some of its most intriguing points.

Dolores attributes the rise of Western civilization and fall of much of humanity — which processes were concurrent and roughly equivalent — to three primary sources: the Greeks' development of an abstract language, the rise of agriculture, and the rise of Christianity. Each of these processes, in complex ways, reinforced a tendency that has become the fundamental impediment to humanity's reintegration into nature — i.e., our view of nature as substance. This view, in turn, entails an anthropocentric view of the world (as Dolores explains in the portion of the book we excerpted in our Eostar 88 issue).

Readers of *EF!* are familiar with the Greek language problem (see Eostar) and the adverse effects of the spread of Christianity (see Lynn White's classic essay "The Historic Roots of our Ecologic Crisis," first published in *Science* in 1967); but few know much of the story of the advent of agriculture. Dolores recounts parts of the story and (as she is wont to do, thankfully) provides extensive reference notes for those desirous of digging deeply into what is one of the most fertile fields of inquiry today. Perhaps the most fascinating aspect of Dolores' agriculture story is her tale of the gourd. The gourd, it seems, may be the most important plant in human history. Many millennia ago, peoples in the Old World and the New gradually discovered that gourds were useful for vessels, ceremonial instruments (rattles), food, and many

other purposes. The earliest precursors of agriculture may have been refuse mounds where grew gourds from the seeds tossed there by satiated human gourd devourers. From these plants growing in their garbage piles, peoples gradually learned how to grow crops. Evidence suggests intentional gourd growing may date back 40,000 years in Africa, and 13,000 years in South America. Dolores' discussion of gourds alone makes this book well-worth her effort and ours. Next time someone tells you you're "out of your gourd," harangue them with an explication of the venerable tradition underlying their words.

A recurring and controversial theme in this, as well as in *Earth Wisdom*, is the healthiness of primitive cultures and certain influential traditions within Oriental civilization as compared to the decadent dominant traditions of Occidental civilization over the past few millennia. While there seems to be a growing tendency among environmental scholars to scoff at what some of them call "the myth of the noble savage" and the glorification of Eastern philosophies, *Sacred Land* will probably rekindle in many an immense respect for primitive and Eastern traditions. Dolores views with especial favor the Chinese Taoist philosophy. It is worth devoting a disproportionate amount of this review to Dolores advocacy of Taoist thought insofar as this is likely to be a part of her book subject to the scalpels of the ever-eager critics. In brief, Dolores suggests that Taoists view life in terms of relationships, whereas Westerners view life in terms of substance, and that this spells the difference between living in nature and living against it. Taoists were by no means unique in taking this view; to the contrary, it has been the predominant view throughout most of human history. The Taoists were unique, however, in setting this view down in writings, writings which are now accessible to modern readers. It is well to quote Dolores at length here: *The Taoist approach to living is the culmination of all the "old ways," which I have been discussing so far in Part II of this work: ethology, archetypes, animal teachings, and lessons from the primitives. Because of the early development of writing in China, all this was written down; therefore today we can have immediate access to it, uncorrupted by later developments in Chinese history. Essentially, according to Wing-Tsit Chan, "Taoists were keenly interested in nourishing, preserving, and restoring the original nature of man."*

Taoists were not "other-worldly mystics" or "occult beings"; they were much like us in that they were intellectuals who realized the necessity of returning to the original human and to find that out, they turned to nature herself. . . .

But today, for many people there remains the question: "Is it possible for humans to live according to the 'old ways' or do we have to continue the present course of the Industrial Growth Society . . . ?" Yes, it is possible. Exactly this same situation confronted intellectuals who loved nature long ago in China. Of course, it was on a much smaller scale — only imperial China was involved, not the entire world. But these intellectuals in long-ago China had a great advantage over us. They still had immediate access to both "wild nature" and the "wild hill tribes."

This, in short, is the legacy of what is called Taoism. The very form of the land itself in China is what "afforded" these intellectuals the opportunity to lay down the "way" so brilliantly. The map for the population under the Han Dynasty shows that 2000 years ago, the main population of China was confined

to thin bands of settlements along river valleys. Here there was a complex, hydraulic civilization based on irrigation, but between these valleys were steep, complex small mountain chains. This territory was occupied by tribal peoples, still living in the original primitive way. . . .

Dolores also devotes considerable attention to animal ethology. Drawing from her own experiences with wild animals, from Jungian psychology, and from the studies of Konrad Lorenz and other ethologists, Dolores demonstrates the continuum between natural human behavior and the behavior of other animals. She explains ways in which humans have learned directly from animals and plants. For examples, African Wild Dogs and Gray Wolves afforded peoples knowledge of how to hunt. Coyotes, ravens, and sage and sagebrush (the latter is of the genus *Artemisia*, a cognate of the name of the goddess of wilderness, Artemis) afforded myths and rituals to many peoples. Storks afforded us Tai Chi. Bears afforded us so many lessons that Earth First! felt compelled to produce a 16-page tabloid on the subject.

I use the word 'afford' repeatedly to stress another key theme in Dolores' work — that of affordances. Dolores explains the importance of humans realizing that we do not create resources; nature affords us gifts. Nature's bounty, nature's resources, are affordances.

Dolores' book stimulates readers not only because of its revelatory information, but also because of her occasional blunt statements which jar the reader out of a complacent acceptance of views popular among environmentalists. For instance, one of the most important points Dolores makes casts doubt over some environmentalists' hope of saving the world: "A mammal cannot bond to the whole earth — it's too big . . ."

Dolores goes on to present a powerful case for bioregionalism. She implies that activists will be most effective fighting for their own bioregions. It seems that Dolores is right, for, excepting perhaps a small number of extremely visionary people and astronauts, we usually do not see and bond with Earth as a whole but see and bond with the place where we reside. Dolores does not, of course, suggest that we not seek to avert the global ecological catastrophes, rather (we can infer from her writing) that the level at which to work for the planet is a level with which we can identify — whether that be a small valley, complete watershed, physiographic province, or (for exceptional people) the whole planet.

This review has merely touched the surface of a profound book, a book whose very title is redolent with meaning. In the end, the reader of *Sacred Land Sacred Sex* is left with as many new questions as answered questions... and that is one reason why it is one of the most important books of this decade.

—Reviewed by John Davis.

TO GOVERN EVOLUTION: FURTHER ADVENTURES OF THE POLITICAL ANIMAL; Walter Truett Anderson; 1987; Harcourt Brace Jovanovich, Cambridge, MA; 376pp.

It may not be news to most readers of *To Govern Evolution: Further Adventures of the Political Animal* that extinction of species, world-wide dispersion of life forms that were previously restricted to native areas, genetic erosion (narrowing of diversity within species), and biotechnology have all been vastly accelerated in recent years. What probably will come as a completely unexpected development is author Walter Truett Anderson's contention that because of these trends, "Politics is about evolution... the two are now one."

How did governance of society meld with natural selection? Through human interference with the primary factors of evolution, either by direct genetic tampering such as in gene splicing or *in vitro* fertilization, or indirectly by exterminating wild species along with their habitats, spreading plants and animals to new habitats, or choosing a few popular food plant and animal varieties over hundreds of local ones. All these activities intervene in Darwin's natural evolutionary patterns and it is now the responsibility of *Homo sapiens* "to be caretakers of a planet, custodians of all its life forms and shapers of its (and our own) future."

There have already been significant

"biopolitical" precedents for conscious evolutionary governance, according to Anderson. The Endangered Species Act ("as momentous in its own way as the Magna Carta") and other public policies including captive breeding programs are attempts to shield certain species from extinction. An example of controlling the migration of species can be found in border restrictions against bringing in agricultural products that might harbor insect pests. Complete dependence on single food plant strains (the underlying reason for the Irish potato famine) is guarded against by national and international seed bank programs that preserve broad differences within species.

It is biotechnology, however, that is likely to give the presumption of governing evolution its greatest claim to believability. For Anderson, gene splicing and other forms of biological engineering are bringing on a Biological Revolution that "will alter the conditions of life for all people everywhere... a traumatic development in many ways which will produce both great benefits and serious social and personal disruptions." This upheaval can be eased somewhat by following genetic policy-making rules that: a) allow agendas to operate in a context of continual change (no more illusions about steady-state economics or other areas of sustainability); and b) permit more and more phenomena to be lifted out of nature and into politics. Control over biotech impacts can be maintained by "triangular interplay among scientists, the public and government." The sooner we accept this new political dimension the better because: "The realities of the times demand global ecological — an evolutionary — governance."

There's a peculiar mix of arguments leading to this book's conclusion that seem drawn equally from the concerns of environmentalism on the one hand and awestruck regard for biotechnology on the other. The latter may be responsible for frequent bursts of overstatement: "Darwin's laws have been repealed," and: "Every day is Genesis." Popular critics of gene splicing are characterized as ill-informed hysterics or headline-seekers discovering a "sudden source of influence, fame and other heady rewards for anyone who captures a mass-media role in opposition."

As for putting ecological concerns at the center of governmental decision making rather than tacking them on as an afterthought in response to some new disaster, plenty of individuals and groups have already reached that conclusion without needing the rationale of evolutionary governance to guide them. In fact, the wide extent of negative human impacts on the planetary biosphere during the industrial era stands for many people as a warning against expanding our role in this way in the future. Even the author wants what sounds like a pre-industrial world of "abundant wildlife, vast wilderness spaces and human-scale cities — a vision I find immensely compelling." But he goes on to say, "it is not to be achieved by backing away from the reality of our intervention, but by recognizing the full extent of it and going forward through new acts of imagination and creativity." This is a kind of apotheosis for anthropocentrism and human mastery of nature based on the logic that because we have already done so much damage we should therefore assume complete future domination.

More biocentric approaches to our future role on this planet are derided as being inappropriate considering the full extent of our intervention in global ecology and evolution. For Anderson it is "naive to equate the values and beliefs of the environmental subculture that currently exists in the West with the global culture of the future." Ecotopian sentiments are merely localistic and would lead to a counterproductive politics of separatism. Bioregionalists who strive to restore natural systems and find sustainable ways for inhabiting their life-places are impractical in trying "to buck the tide of global plant and animal transfer... proponents will find that protecting the integrity of a bioregion is as difficult as protecting the integrity of a race, a fundamentalist culture, or a sovereign nation." It almost seems that nature itself is no longer capable of offering authentic models for instructing our species when: "Today the driving force in evolution is human intelligence."

The eventual shape a planetary government would take is somewhat apparent today in the interactions between nation-

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states, intergovernmental organizations, multinational businesses and non-governmental organizations as they react to globalizing forces, Anderson believes. With typical hyperbole he declares that "the human species... over the last forty years, transformed its institutions of governance and brought forth the first world order." Further refinements will come through establishing a global civic culture which acknowledges that "Globalism and exponential change are the framework within which the political animal must now go about its business."

In the name of replacing a blundering and negligent approach to our ecological responsibilities, Anderson has gone overboard by suggesting the new role of a supreme planetary commander. He assumes that the human species is fully capable of measuring the costs and values of all past and present disruptions while cannily estimating the future effect of fresh ones such as manufacturing life forms. This "adventure" might work as a Star Trek episode titled "Captain Kirk Straightens Out Plantation Earth," but in the real biosphere there is dynamic interdependence between species. We are only beginning to learn the extent to which tiny viruses can hold mighty *Homo sapiens* hostage, for instance. Human beings exert dominance at new points in the web of life only at risk of becoming subjects of other parts of it. What's missing from the case for evolutionary governance is a sense that other species interact in the process and have something at stake. Anderson has come up with a new version of monarchy by our species just when we need a representative government to hear and follow the voices of non-human species and the arguments of wild nature.

Reviewed by Peter Berg; originally published in the British journal Futures. Peter Berg is the founder of the Planet Drum Foundation and a leading proponent of bioregionalism and reinhabitation.

BIG SKY, FAIR LAND: The Environmental Essays of A.B. Guthrie, Jr., edited by David Petersen; Northland Press, Flagstaff, AZ; 187pp, \$17.95.

A.B. Guthrie has been around a long time. Born with the century, he is now 88. A genuine oldtimer, who has lived almost all of his life in Montana, Guthrie has certainly earned the right, if anyone ever did, to say what he thinks about the land he loves. And say what he thinks is what he does.

We live in a time when the majority of American writers, even those who consider themselves nature-lovers or outdoorsmen or naturalists, have adopted the most craven and cautious of attitudes when placing words on paper. Concerned primarily with their literary reputations, as determined and measured by the East Coast official literati, they take extreme pains to avoid the hot breath of controversy. True controversy, I mean, the kind that can hurt, that involves career danger. They're perfectly happy to take on safe and conventional targets: racial segregation in South Africa, for example; that's always popular. *Apartheid* is far away; attacking it makes them look good, feel virtuous, and costs nothing. But involve themselves, say, in some environmental war right here in the United States? Goodness gracious - what would James Atlas say? John Updike? Susan Sontag? Alfred Kasin? Saul What's-his-name? Miss Anatolia Broyard?

Bud Guthrie is different. Like Farley Mowat up in Canada or Garrett Hardin in California or Charles Bowden down in Arizona or Wendell Berry back in Kentucky, he seems to lack a proper concern for the proprieties of literary protocol. Like Henry Thoreau or Mark Twain, Guthrie says and writes what he thinks, always an awkward, embarrassing thing for an American writer to do. Listen to this:

One of our prime values is space. I don't want it destroyed by an influx of outsiders... We have enough people already, and development is a word for invasion and pay-off.

Or this:

Today I wish I could see Thomas Jefferson. I wish he could see us - that man who thought 10 people per square mile about the right limit of human congestion.

Or this:

The brute fact is that there are too many people on earth... I come from a family of nine and suspect that my mother would

not have died when she did had she not been worn out with childbearing... I am arguing for birth control... for family limitation... for abortion on request... To me it is ironic and wrong that men, some celibate, have had... so much say on the question of abortion. It's damn little of their business. Let the women decide....

And this:

The Pope recently said that birth control in the famishing countries would take from the poor the pleasure of having children. Had he consulted the poor, I wonder? Did he have a consensus from the wives of the poor? Would he impoverish us all to support the poor and prolific? He didn't say. What does he know about the pleasure of having children?...

Rather in poor taste. But this man Guthrie is unconscionable:

Thousands are starving in Asia and Africa and elsewhere, and we lay their suffering... to climate or crop failure, or unsettled economics and underdevelopment. These are factors, but the first factor of all is that they've been too prolific. In our humanity we try to feed them, ignoring the cruel likelihood that, by nourishing them, we increase their fertility.... Only by recognizing that our planet has limited resources and can support only so many people do we get to the root of the problem.

Scandalous. And all of the above comes from merely one chapter of this book, a speech that AB Guthrie made before a gathering of The League of Women Voters. The remainder of the book is equally strong, pointed, bold and candid, hot as good salsa and up-to-date as Gorbachev, though parts were written yesterday and others nearly a half century ago. Humankind's relations with Mother Earth are not a matter of fashion; they are permanently topical, always front page news. Or should be. Ask the Carthaginians. Or the Assyrians. Or the Mayans.

Perhaps so, the reader grumbles, but we've heard it before, over and over again, for about twenty years now. Make it new. What's the latest on Truman Compote? What are the current ratings of the Kerouac Kult? Who's the latest Magic Realist out of Paraguay?

Yes, we've heard it before, in various versions, but not from the author of *The Big Sky* and other definitive historical novels on the exploration, conquest, settlement and trivialization of the American West. The voice of AB Guthrie is an original voice, with the power to make a familiar story fresh and stirring and dangerous once again, as a good story should be.

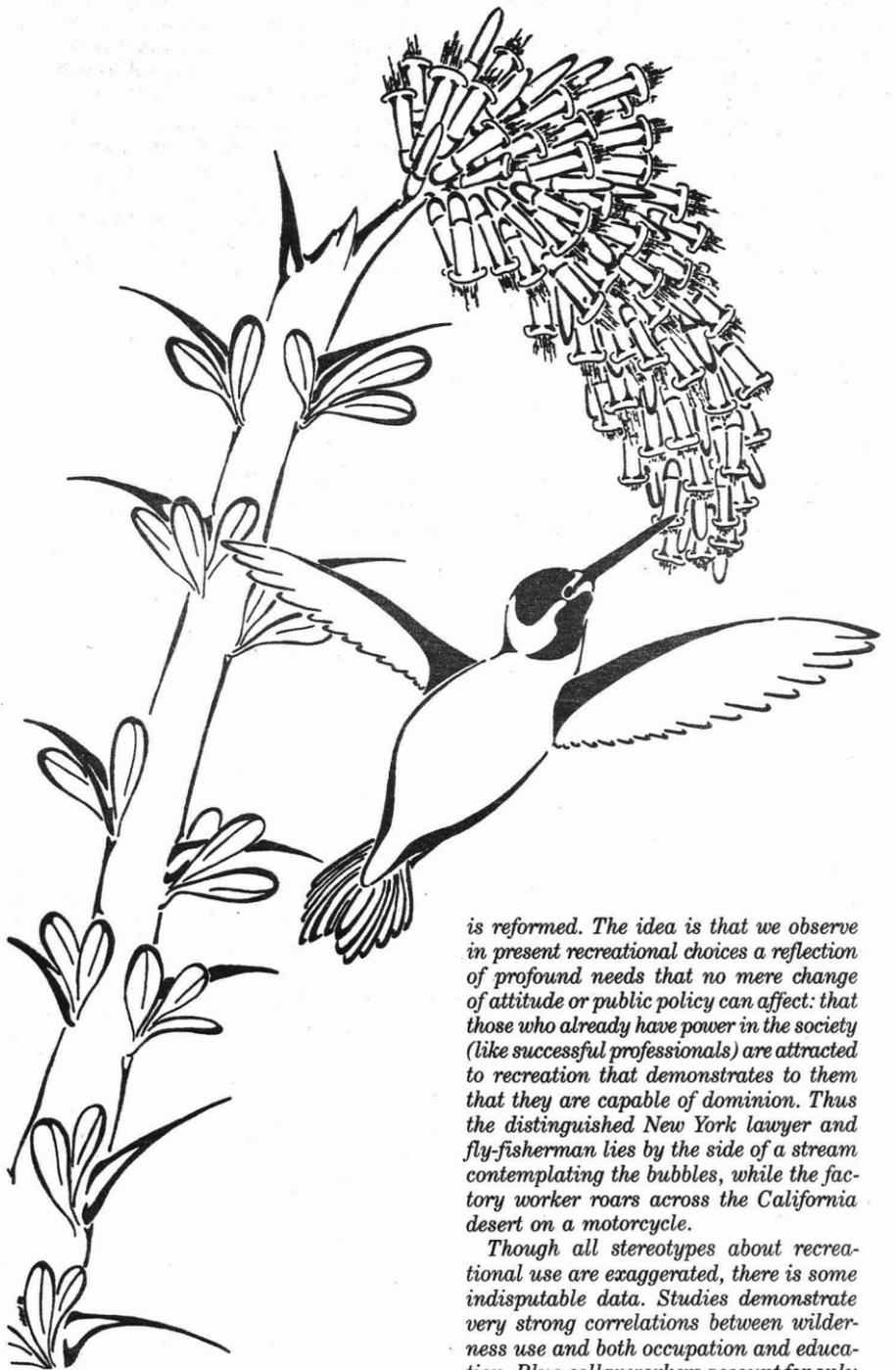
Guthrie's essays in this book are preceded by the editor's useful and enlightening 65 page introduction. David Petersen makes clear what should have been apparent when we first took up the adventures of Boone Caudill, that author Guthrie was concerned from the very beginning with a guiding theme: men tend to destroy that which they most need, the good Earth itself. His six-volume fictional saga, from *The Big Sky* through *The Way West to The Last Valley*, develops this theme from exultant beginning to somber end. The essays of *Big Sky, Fair Land* make explicit what is implicit in the novels. Neither can be reduced to the other. The essays are about the world we live in; the novels, like all good stories, create a world.

Read both.

The reviewer, Edward Abbey, is the author of One Life At A Time, Please, a forthcoming novel The Fool's Progress, and some dozen other books.

MOUNTAINS WITHOUT HANDRAILS; Joseph Sax; 1980; U of Michigan Press; 110pp; \$9.50 from EF! Books.

With the publication of *Mountains Without Handrails*, a year before *Earth First!* began publication, Joseph Sax may have become the first environmentalist to acknowledge and defend in writing the apparently elitist orientation of public lands management advocated by "preservationists." Other preservationists had long advocated protection of wildlands in a manner that would, in effect, relegate them to only a small segment of US citizens; but they had contested or ignored claims that such strict wilderness protection is elitist. Sax recognizes the grain of truth in the charge that preservationists are elitist, yet boldly defends the aims that provoke that charge. He advocates strict preservation of wildlands such that the quality of people's wilderness experiences is maximized, though the numbers that may have direct wilderness experiences



may be reduced.

Sax - writing before the advent of *Earth First!*, before the rise of deep ecology as a coherent and publicly explicated philosophy, and before the publication of Stephen Fox's *The American Conservation Movement: John Muir and His Legacy* and Michael Cohen's *The Pathless Way* (which, more than previous biographies, revealed the depth of Muir's appreciation for nature's intrinsic worth) - portrays preservationists as spiritual utilitarians. He suggests that preservationists long sought to preserve National Parks in an undeveloped state, not because they opposed roads and other developments *per se*, nor even because such developments damage healthy ecosystems, but because such developments mar the contemplative and inspirational value of wildlands. Presumably, if Sax were writing now he would acknowledge that many preservationists do profess a desire to preserve wilderness for its own sake; but, unfortunately, his portrayal of preservationists prior to 1980 is probably largely accurate. Even such great environmentalists as Robert Marshall and Aldo Leopold (until his latter years) were loath to advocate preservation of wilderness for its own sake. In chapter four, Sax does mention a type of preservationist who justifies his or her arguments in terms of the land:

While one element of preservationist advocacy is scientific and truly based on principles of land management, another - and it is very clear in national park controversies - is dominated by value judgments, by attaching symbolic importance to the way people relate to nature. (p.51)

Sax explains that different classes of people comprise different classes of recreationists. Factory workers drive off-road-vehicles. Educated professionals use the wilds in more benign ways; they fly fish, hike, or climb. As Sax makes apparent, the reason for these opposing interests of different classes of recreationists represents a fundamental obstacle to preservationists. Here his insight is particularly keen, and offers a lesson that environmentalists overlook at their own peril:

These observations are a warning to recreational idealists, implying that no effort to encourage more challenging and less "disturbing" leisure activity can hope to succeed unless and until the workplace

is reformed. The idea is that we observe in present recreational choices a reflection of profound needs that no mere change of attitude or public policy can affect: that those who already have power in the society (like successful professionals) are attracted to recreation that demonstrates to them that they are capable of dominion. Thus the distinguished New York lawyer and fly-fisherman lies by the side of a stream contemplating the bubbles, while the factory worker roars across the California desert on a motorcycle.

Though all stereotypes about recreational use are exaggerated, there is some indisputable data. Studies demonstrate very strong correlations between wilderness use and both occupation and education. Blue-collar workers account for only 5% of all wilderness visits. One study revealed that two-thirds of wilderness users were college graduates... If alienating work is an important constraint on recreational choice, that only adds one more reason to desire that the workplace be reformed. (pp.48-9)

Thus, ironically, though Sax defends preservationists' seemingly elitist aims, he here presents an argument that shows potential common ground for social reformers and preservationists. Furthermore, Sax endeavors to show that preservationists' aims are not actually elitist. He suggests that preservationists have long sought not to exclude people from wilderness, but to elevate those who do visit wilderness to higher levels of consciousness.

Sax's prescription for the ailments of National Parks, while not reflecting a deep ecology perspective, nonetheless merits consideration by all environmentalists and public lands managers. Sax lucidly promulgates a very general agenda for National Park management which would allow and even encourage tourist developments in popular scenic areas but would prohibit and remove such developments from wild core areas. If Sax's scholarly work gains recognition in the Departments of Interior and Agriculture, perhaps we will eventually see Park Service and Forest Service employees removing handrails from the mountains.

Reviewed by John Davis.

BATTLE FOR THE WILDERNESS; Michael Frome; 1974; Westview Press; 235pp; \$20 from EF! Books.

Michael Frome is one of the most highly regarded environmental journalists in the US, and his book *Battle for the Wilderness* was one of the earliest literary explorations after passage of the Wilderness Act in 1964 of the significance of that act. In this fascinating book, Frome explores the values of wilderness (cultural, scientific, recreational; habitat) and the political battles involved with preserving it.

In perhaps the book's finest chapter, Frome explores the significance of wilderness in American culture. He discusses influential writers and artists whose works had roots in American wilderness. The list reads like a litany of America's most creative thinkers (aside from those not publicly recognized, such as the many

women in US history who have created undiscovered art or literary works): John and William Bartram (18th century botanists and members of the East Coast intelligentsia), Alexander Wilson (one of the first American ornithologists), John Audubon, John Muir, Henry David Thoreau, Ralph Waldo Emerson, Herman Melville (author of *Moby Dick*), James Fenimore Cooper (*Leatherstocking Tales*), Walt Whitman, Mark Twain, John Wesley Powell, Robert Frost, Robinson Jeffers, Ernest Hemingway, Sigurd Olson, Rachel Carson, Joseph Wood Krutch, Wallace Stegner; and artists George Catlin, Albert Bierstadt (first major landscape painter to sketch Rockies), Thomas Cole and others of the Hudson River school of art, Charles M. Russell, and Georgia O'Keefe.

After convincing the reader of the profound influence of wilderness on American culture, Frome discusses the history of wilderness preservation efforts and reveals lessons to be learned therefrom. Frome cites the numerous contested areas - North Cascades and Olympic Peninsula in Washington, Gore Range in Colorado, Sipsey Fork of the Black Warrior River in Alabama, and many other areas with National Forest land - where the Forest Service proved itself capable of protecting designated Wilderness yet consistently opposed to further Wilderness designations.

It has oft been said and it bears repeating that it behooves us to know our history. Environmentalists will gain much from reading Frome's account of the efforts of Muir, Aldo Leopold, Robert Marshall, Howard Zahniser, Harvey Broome, Robert Sterling Yard, Brenton MacKaye and others to save vestiges of the American wilds.

Reviewed by John Davis.

THE ANCIENT SCIENCE OF GEOMANCY: Living in Harmony With the Earth, Nigel Pennick, CRC Publications (POB 1460, Sebastopol, CA 95472), \$12.95.

Geomancy is divination by means of some aspect of Earth, particularly by the observation of points and lines on Earth. This definitive book about geomancy is significant because it substantiates that our ancestors applied "the science of putting human habitats and activities into harmony with the visible and invisible world around us." Geomantists were concerned with the propagation of fertility, the cycles of the seasons, the calendar, water sources, and the positioning of fields and buildings. For our ancestors, the architecture of buildings was based on the intrinsic geometry underlying all material things. Our ancestors closely studied nature, and placed everything artfully to reflect their close attunement with Earth. Humans' symbiotic relationship with the ecosystem was not yet broken, and intuition was a human's guiding principle.

Our ancestors practised Nature religion. They especially valued meteorites and rocks (particularly the great outcrops), and respected the spirits of the natural world. With the invention of agriculture, determination of planting and harvest times became important. They noted lunar cycles, formalized a calendar, recorded lengths of the day in relation to the calendar, and so on. Later, astronomy led to the creation of highly complex structures like Stonehenge. These indicated the positions of solstices and equinoxes, serving as a doublecheck of the calendar, in addition to providing information required for determining irregular events, like long-term sun and moon cycles, their perturbations and eclipses. Agricultural events and religious festivals were held on the correct days, and "science, magic, and religion were an integrated discipline, simply forming divergent aspects of the same corpus of applied knowledge."

This book explains the role of dowsers in determining spots of heightened energy, and how sacred structures are aligned with each other on Earth's surface. It includes a description of the Big Horn Medicine Wheel in Wyoming, the Oglala Sioux Medicine lodges, and even of Henry Thoreau's Walden Pond cabin. It seems that Henry "oriented its diagonal towards the equinoctial sunrise in order that he might be in harmony with nature." The book is replete with information about the design of buildings using sacred geometry, particularly religious temples and churches; and the use of geomancy to design cities, notably in ancient China, prior to the more contemporary grid style. Pennick explains how the urbanization of the countryside, electrification,

mechanization of farming, the automobile, and mass communications media all led to the decline of geomancy. Recently geomancy has been rediscovered and revived. "Urban humanity is so divorced from intimate everyday contact with the Earth and its cycles that the modes of thought which underlie the practice of geomancy must now be consciously cultivated in order to be comprehended." In other words, people need to realize that they are far removed from the type of world where geomancy was an everyday fact, and begin to reenvision it as a natural part of life.

For more information on the resurgence of geomancy, contact the Westcoast Institute of Sacred Ecology, 2816 9th St, Berkeley, CA 94710.

Reviewed by Craig Stehr.

DEADLY DEFENSE: Military Radioactive Landfills; Dana Coyle, Lisa Finaldi, and others; Radioactive Waste Campaign, 625 Broadway, 2nd Floor, New York, NY 10012; 1988; 169pp; \$15.

The mass media have recently reported that mismanagement at the nation's plutonium production reactors could lead to a melt-down and catastrophic release of radiation. *Deadly Defense* demonstrates that mismanagement in all aspects of our nuclear weapons production is already causing irreversible environmental damage. In the words of the conclusion, "Enormous quantities of poisonous radioactive materials are inexorably seeping out of the ... facilities. Land, air and water, and all biological species, including humans, are all being contaminated."

The authors at the Radioactive Waste Campaign describe in detail, one site at a time, the weapons production facilities currently producing radioactive waste. Their indictments are convincing and alarming.

At Hanford, the Columbia River in its last free-flowing stretch runs along the eastern boundary and across the northern portion of the site. The Yakima River comes close to the southern boundary. The Department of Energy, which owns weapons production facilities, has identified the Hanford section of the Columbia "as the habitat for bald eagles, as well as the river's last major spawning area for chinook salmon and steelhead." Yet at 24 locations, liquid transuranic waste, including plutonium, has been dumped into ditches, ponds, or wells, from which it may eventually reach the rivers. Already, strontium-90 is contaminating the Columbia, and iodine-129 the Columbia and Yakima.

At the Nevada Test Site each "explosion creates a large, buried radioactive waste inventory at each detonation site, which is - in the practical sense - irretrievable." "There is ample evidence that underground explosions have contaminated the underlying aquifers." One reason for the contamination is that every test digs out a cavity; and groundwater flows into the cavity if the explosion occurs, as many do, below the water table.

Soil samples taken in 1985 from the Savannah River Swamp next to the Savannah River weapons production site contained concentrations of cesium-137 about 1500 times greater than background. Leaching from the site's radioactive waste burial grounds and surface impoundments threatens the Tuscaloosa aquifer, used by Atlanta; toxic chemicals from the plant have already entered the aquifer.

The common denominator in the descriptions of almost all these nuclear weapons facilities is radioactive contamination of water supplies. Radioactivity has often been directly released into water by injecting contaminated liquid through wells into aquifers; and radioactive materials released into the air or buried in the land tend eventually to mingle with water. Water "is the key resource at risk." This fact gives the message of the book even greater urgency in late 1988, after the summer's heat and drought, than it had when the writing was completed. The greenhouse effect is not mentioned.

The authors do not intend to leave readers in despair, although they admit that it is late to begin trying to remedy the damage that the weapons complex has already caused. *Deadly Defense* is a tool for action. The accounts of each plant contain the basic information an organizer should have to convince the public, and are accompanied by excellent, eminently photocopyable diagrams plus background material on such relevant matters as the danger of low-level radiation. Examples of effective citizen campaigns and address-

ses of organizations are included, as are a glossary and index.

The book closes with a list of policy recommendations, including the phase-out of production of plutonium and tritium, and regulation of the weapons facilities by a new, independent board or agency. These recommendations, *Deadly Defense* shows, should be a concern not only of the peace movement and medical personnel, but of environmentalists, conservative or radical.

Reviewed by Mary Davis

ECONOMICS AS IF THE EARTH REALLY MATTERED: A Catalyst Guide to Socially Conscious Investing, Susan Meeker-Lowry, 1988, New Society Publishers (POB 582, Santa Cruz, CA 95061), 294pp, paperback \$9.95.

Earth First!ers are not of the moneyed class. Nor are they generally inclined toward speculation on matters economic. Indeed, many EF!ers are positively impecunious and so averse to modern monetary systems that the mere mention of the Dow Jones Industrial Average nearly makes them retch. Nonetheless it avails such radicals not at all to deny the power of money. Susan Meeker-Lowry tells how that power may be used for good, to counter the ills for which such power is normally employed. However, she is careful to remind us that ethically appropriate investing is a limited measure, and one that should only be seen as transitional:

Social investing... is a useful tool and an interim step that can help us get from where we are to a more humane and Earth-based economy. It can begin to wake us up to the gross irresponsibility of much of corporate America and help us learn more about the effects of our financial activities on the rest of the world. It also opens the debate over whether we 'should' integrate money and values. It begins the essential process of making connections between our actions and world circumstances while preserving the so-called security of the bottom line. And, once in a while, social investing makes a difference in some corporations and gives us a hint of the extent of our economic power. (p.97)

She then proceeds to an explanation of the more powerful and necessary economic strategy: investing in social change. "What differentiates social investing from investing in social change is a commitment to the value of the individual within the context of the (human and Earth) community..." (97) Investing in social change goes far beyond merely investing money in an ethically responsible manner. It involves creating or supporting activities which will help usher in a whole new economic system, one which is decentralized and Earth-centered.

Susan Meeker-Lowry cites examples to show that the socially responsible investment movement is fast growing. Striking from these examples is the comparative lack of attention given to wilderness and wildlife concerns. The author herself is clearly motivated largely by these concerns, but the institutions she describes pay much greater attention to social than to environmental problems (these of course are related, but this does not diminish the fact that alternative investors still heed too little most environmental crises.) What this will suggest to those with proclivities toward subversion is the need for infiltration. Mainstream environmental groups are largely comprised of upper-middle class Americans. Why are not these well-endowed environmentalists pressing their agendas upon alternative economic establishments. Why are they not quietly guiding such institutions toward greater emphasis on wilderness concerns; toward putting the interests of imperiled wildlife on a par with those of downtrodden people. (The fact that environmentalists have failed to do so is evident from the letter Susan Meeker-Lowry sent us for our Lughnasadh issue, in which she decried the lack of environmental awareness shown by Franklin Research & Development in its choice of Weyerhaeuser as an ethical investment.)

Many other lessons unstated and stated can be gleaned from this important book. Perhaps most importantly, it tells us how we, as consumers, can mitigate (yes, you, too, can mitigate!) the negative effects of our purchasing habits by buying ethically. So, whether you have money to invest, Sierra Club friends to coerce, are simply part of the consuming public, or are seeking ecologically sustainable ice cream (Ben & Jerry's Homemade Vermont Ice Cream; this continent's best commercial

brand), *Economics as If the Earth Really Mattered* matters to you.

Reviewed by John Davis.

ENDANGERED RIVERS AND THE CONSERVATION MOVEMENT; Tim Palmer; U of CA Press; 1986; \$24.95 hardback; 290pp. plus color plates; available in paperback from EF! Books, \$15.

The National Wild and Scenic Rivers System could reasonably be called the most incomplete preservation system in the United States. While Wilderness Areas comprise approximately 90 million acres (56 of that in Alaska), National Parks and Monuments also about 90 million acres, and National Wildlife Refuges again about 90 million acres (77 in AK); the National Wild and Scenic Rivers System protects only about 125 river segments totaling less than 8000 miles, which - with the quarter-mile-wide protected zone on each side of designated rivers - covers less than 5 million acres. (This figure of 8000 miles can be brought into perspective by considering that the US has over 3.5 million miles of major waterways, and that in the East alone, 23,000 miles of waterways are said to be severely acidified by acid rain.) These figures are rough estimates, and, of course, some designated river segments are within Wilderness Areas or National Parks, but it remains incontestable that unspoiled rivers and their environs have not received adequate protection. Tim Palmer's excellent book may awaken environmentalists to the need to fight for designation of the many *de facto* wild river segments remaining in the United States.

Palmer concisely chronicles the history of river desecration in the US - beginning with the damming of Maine's Piscataqua River in 1623; perhaps reaching an apotheosis with the damming of the Colorado River's Glen Canyon in 1964; and continuing, slightly abated, with the thousands of water projects pending today. Among the projects now threatening US waterways, Palmer cites the hundreds of small-scale hydro projects proposed for New England and the Pacific states, the Auburn Dam proposed for the California's American River, Two Forks Dam proposed for the South Platte River in Colorado, a navigation project being planned by the Army Corps(e) of Engineers for Alabama's Coosa River, and about 130 other proposed dams and water diversions.

Palmer also chronicles the history of river preservation efforts - beginning with John Muir's fight against the damming of Hetch Hetchy; perhaps culminating with Mark Dubois' famous stand (chained to a rock in the region to be flooded) against the New Melones Dam on California's Stanislaus River; and continuing sluggishly today with efforts (which, since publication of this book, have proven partially successful) to designate portions of California's Kings, Kern, and Merced Rivers, and several river segments in Colorado, as Wild. However, Palmer explains that only in recent years have environmentalists fought to save rivers for the sake of rivers. Previously, activists opposed dams for economic or recreational reasons or - in the case of true preservationists such as John Muir and David Brower - mainly for the sake of surrounding lands. Rivers in and of themselves did not gain a strong constituency until river running introduced thousands of Americans to the beauty of unfettered waters, beginning in the 1960s. Palmer speculates that river-saving may soon become the focus of the environmental movement, as battles for Wilderness - which have preoccupied preservationists for the past 25 years - wind down, with the completion of National Forest plans and determination of the fate of RARE II lands, and the completion (within the next few years) of the BLM wilderness inventory.

In short, Palmer's book will enlighten all who read it. It is one of the most important writings yet published on one of the most important issues in this country - the oft-forgotten issue of river preservation.

Reviewed by John Davis.



DEAR NED LUDD

DEAR NED LUDD is a regular feature in *Earth First!* for discussion of creative means of effective defense against the forces of industrial totalitarianism. Neither the *Earth First!* movement nor the staff of *Earth First!* necessarily encourage anyone to do any of the things discussed in DEAR NED LUDD.

Monkeywrenching News From Around the World

GRAND CANYON URANIUM MINES HIT - The "Evan Mecham Eco Terrorist International Conspiracy" (EMETIC) sabotaged power lines leading to proposed and operating uranium mines north and south of the Grand Canyon in late September. Two to three dozen wooden poles were cut along the line servicing the proposed Canyon Mine south of Tusayan on the South Rim. A half dozen poles were cut south of Fredonia on the North Rim, causing the shutdown of three operating uranium mines, including the notorious Pigeon Mine where 21 *Earth First!*ers were arrested in protests following the 1987 Round River Rendezvous. All the mines hit are operated by Denver-based Energy Fuels Nuclear, the main outfit feverishly turning the Grand Canyon region into an atomic wasteland and industrial park.

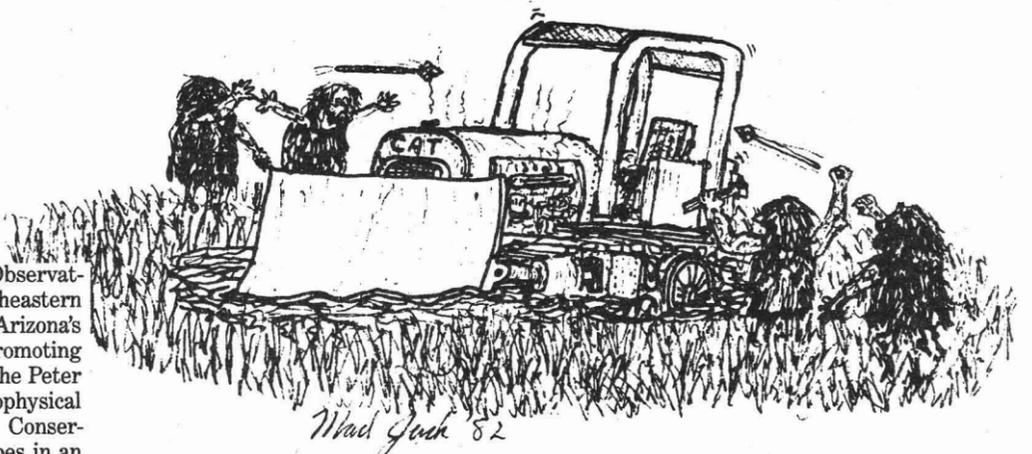
DENVER WATER BOARD DIVERSION DIVERTED - In early September, monkeywrenchers opposed to the Denver Water Board's proposed Two Forks Dam on the South Platte River opened a valve on the water board's diversion gate above Little Vasquez Creek. This sent mud and silt into the Winter Park treatment plant, causing it to shut down for 8 hours. During the summer, over \$3,000 worth of damage was caused to Denver Water Board facilities by graffitiists spray painting anti-dam slogans. **Two Forks**, one of the last big dams proposed in the United States, would destroy a wild stretch of the South Platte River to provide water storage for lawn watering in Denver.

EVEN THOR MONKEY-WRENCHES - Although the incident was blamed on "Earth First! types" by overzealous telescope promoters, authorities have determined that lightning was responsible for an August fire which

burned to the ground a Steward Observatory trailer on Mt. Graham in southeastern Arizona. The University of Arizona's Steward Observatory has been promoting a major observatory complex - the Peter Strittmater International Astrophysical Center - on Mt. Graham. Conservationists have opposed the scopes in an increasingly bitter and confrontational dispute, since the complex would be in the heart of relic spruce-fir forest above 10,000 feet which is critical to the survival of the Endangered Mt. Graham Red Squirrel.

DOO-DOO HAPPENS - Not only has the U of A's Steward Observatory been monkeywrenched by Thor (see above), they've now been shat upon. Their world famous Peter Strittmater International Mirror Casting Lab is located under the football stadium on the U of A campus. During football games this fall, the bathroom sewers have backed up in the stadium and leaked through the ceilings into the mirror casting lab. So deep was the resultant mess that workers wore waders while removing the slop.

SILVER FIRE SALVAGE SALE DESURVEYED - Oregon forest defenders moved several timber sale boundary markers in the North Kalmiopsis Roadless Area during September. Phil Cruz of the Siskiyou National Forest said the action cost the Forest Service at least \$4,000 in lost labor and materials. The Forest Service, expressing their displeasure at those who would halt their programmed destruction of the world's most diverse temperate rainforest, has offered a \$500 reward for the culprits. The Head Fred on the Galice District, Terry DeGrow (an appropriate last name for a timber beast), said monkeywrenching has increased dramatically on the Siskiyou NF this year. He mentioned frequent damage to the Wilderville log scale ramp, tampered mileage signs, and paint damage to the big "Welcome to



Your National Forest" signs on the Siskiyou. Some of the damage was attributed to the dreaded "Stumps Suck" movement, which some say makes *EF!* look like a bunch of Nature Conservancy real estate agents.

SOUTH INDIGO LOGGING EQUIPMENT TRASHED - The Sherman Contracting Company claimed it had suffered damages of \$60,000 after forest defenders decommissioned some of their logging equipment stored at the South Indigo logging site in the North Kalmiopsis Roadless Area of southwestern Oregon. Co-owner Frank Sherman said that the clearcutting opponents had hiked into the site between August 11 and 17. "People have said they wanted to stop us from logging the timber... and I guess they've succeeded. So far, they've stopped us for a while, at least."

Sherman calculated the damage as follows: 1) dirt in the transmission filter and oil pan of one yarder caused engine damage of \$13,000 and transmission damage of \$12,000; 2) dirt in the engine of a log loader, \$6,000; 3) dirt in the engine of a bulldozer caused "severe" damage, no dollar estimate available; 4) dirt in the oil filter and engine of a skidder also caused severe damage, no estimate available; 5) one and half weeks of lost work cost the company \$15,000; and 6) lost wages to the workers cost \$6,000.

ROSWELL TERRORIZED BY "ECTO-PLAZM" - Officials have determined that the vile green gunk seeping from a canister labeled "Radioactive" and found lying in a gutter in downtown

Roswell, New Mexico, was actually a child's toy called "Ghost Buster's Ectoplasm." Roswell is on the route for radioactive shipments to the WIPP (Waste Isolation Pilot Project) low-level radioactive dump in nearby Carlsbad. Citizens of Roswell got something to think about from the prank since it made front page news for two days in the town's newspaper.

BLM OFFERS BIG BUCKS FOR SPIKERS - Reeling from what they called "the most extensive spiking in the history of the Bureau," the Medford District (Oregon) Bureau of Land Management offered a \$13,000 reward (including funds from the timber industry) for the tree spikers who vaccinated old growth Douglas-firs in the Howcome Peek Timber Sale. That kind of reward shows that tree spiking and other monkeywrenching is costing the destroyers of the Oregon forest a few bucks.

NOTE FROM NED LUDD:

Due to general sloth, which he blames on a mere spider bite, Dave Foreman failed to get me this issue's column (except for the paltry news items above) in time to print. The sluggard assures me that he will have a fat batch of monkeywrenching tips for me to present in the Yule issue and that, yes, he and the equally worthless Bill Haywood are indeed working on the *Ecodefense Supplement*. They asked me to remind you armchair monkeywrenchers out there to continue to send your ideas to them in care of myself: Ned Ludd, POB 5871, Tucson, AZ 85703.

DO YOU KNOW?

What single factor influences human existence, Man's health and psychological patterns, environment, culture and Technology more than any in the world? WATER!

Do you know that every culture has declined, diseased and disappeared in direct relationship to the decline, disease and disappearance of its forest, vegetation and natural water sources?!

Failure to recognize the direct relationship of water management to physical and psychological health and climate has allowed whole cultures and ecosystems to become extinct!

Do you know that the very profiles of our water channels and containers for transportation and storage are destroying our water?!

Do you know that there are direct parallels to epidemics and cancers with over-oxygenated water?!

Everyone who is unfortunate enough not to be able to get their water from a fresh cool natural spring should consider where his water comes from, how it is transported and through what artificial means it is made drinkable.

Those who year after year are forced to drink only sterilized water should, for once, consider what effect such chemically adulterated water has on their organisms. Water which has been sterilized and adulterated leads inevitably to bodily decline. It also causes spiritual debilitation and a systematic degeneration of the very foundation of Manhood.

"CAUSES" Newsletter; P.O. Box 3110-EF; Laredo, TX 78044, looks at the reasons behind our global crisis and offers solutions for Technology, Agriculture and Your Daily Life.

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gaid's act



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The tradition continues. "Carry It On" 1989 Peace Calendar by Syracuse Cultural Workers. A full color celebration of life and justice. Dedicated to AIDS victims and care givers with a Names Project quilt image. Other subjects include children, Bread & Puppet Theatre, Margaret Randall, Ernesto Cardenal, a coyote and Turtle Island in batik. People's history, lunar cycles, all holidays. 14x11 folded. By mail, \$10.95; 3/27.70; 5/\$43.95. Full color catalog of hundreds of posters, holiday cards and note cards \$1, free with order. SCW Order Service, 126 Intervale Road, Dept. CL88, Burlington, VT 05401, (802) 863-1394.



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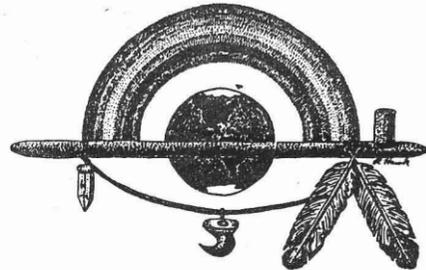
Armed with Visions

clear as cut glass

& just as dangerous



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SEED POD AND RESINOUS CONE

This piece is from Pearson's excellent deep ecology-rich, bioregional chapbook: *On Speaking Terms with Earth*, Great Elm Press, RD 2, Box 37, Rexville NY 14877, 1988, \$4

Earth turns into the brittle season
washed and chilled by rain.
Crickets now have little to say.
To silent roots the trees draw down
the sugar in their veins.
Wild geese point out routes
for summer dreamers.
Faded leaves hang faltering in wet wind.
How I freeze for the warmth and ease
of the Sun.



No need to give the cold more scope
than all of a sparse season.
Secrets are visible now.
Seed pod and resinous cone reveal
a symmetry that settles me.
I can be still,
outwait the shortened light.
This is not dying.
Only a necessary step
deeper in.

Jean Pearson
Bethlehem

SHORT AUTUMN PRAYER

May the Big Bomb thought
no longer enter
our lunchbreaks
May the tamaracks
hold longer onto
their gold



Rik McMonagle
Berkeley

FATHER AND SON

Olympic Coast, July 17, 1980

On this point of rock—
I stand. Surrounded by breakers.
And cry out over them to where all of it
ends. Oh it doesn't curve much ... But it comes around. The sun
passing like love through my limbs. Rocks rise up
from the sea. Not so fast
as cedar lifting out
from them.
And I— I open— the one world
here. And let go my salt tears over
lips and breast. Right through these hands
into the inbreaking tide.



A gull cries like my grandfather dying
in my arms. The seal disregards
on a farther rock
fathoms crashing up. And an otter
rolls from under to behold—
out of a simple face. While ravens mock.
I call into their other
blue. Where a heron passing long as the vowels—
Though it goes not blue forever.
And the moon pulls round
with all there is. One bright Venus. Red
Mars. Jupiter.
Saturn. No it doesn't come fast ... But comes for me.
And here now
I cry my voice out into the breaking black,
And it doesn't go far. Or last long.
But it comes around.

Dick Bakken
Bisbee

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Memory bear ain't driving
Big trucks
Memory bear ain't the
Politician
Memory bear don't
Swear allegiance
Roaming man-beast
Atop crystal peaks
Sierra-song
California-song
Memory dream
Lives in my heart
Walks on four paws
Paws with claws

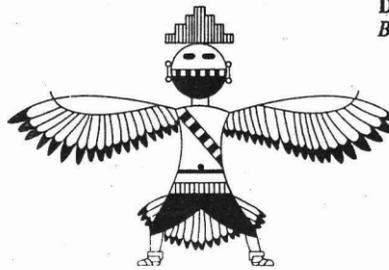
Carlos Purple Bear
Emeryville



RATTLESNAKE WOMAN

rattlesnake woman
please don't strike me with your venom.
my medicine that cured
you found an antidote for.
you cast a spell it could not heal.
o rattlesnakes
waiting in the shade of the hot sun
don't cut me down.
from sadness inside i know i taste bad
i'm no competition for tastier prey.
consider me not
as i pass thru your land.

Will Staple
Jackass Flats



WALTZING IN ILLINOIS

a little way in back of the farmhouse
was a garden that had been taken over
by a tenacious growth of white morning glories —
bindweed, moonflower carpet,
only the wild blackberry was stronger,
nearby on the ruins of the barbed wire fence.
a path ran by it, a double path
the tractor travelled pulling a load
of hard corn for the hogs,
and to the right, a field —
waving sweet corn, newly tasselled —
and in the sky a round moon like a plow's disk.
come back with me in the dark
and i will show you how stars drift
out of the patch of ruined garden
and waltz around the yard.

Dennis Fritzinger
Berkeley



FULL MOON POEM

How many lifetimes
have I waited for this moment?
Sipping flower-starred tea,
watching the moon dance
with the beat of my heart.

Kim Ly Bui-Burton
Santa Cruz

MY PASSION

My passion is the Florida Gulf coastline of my youth,
now ripped apart, barren, blackened with oil.
I used to watch Roseate Spoonbills nesting;
and tiny snails climbing slowly to reach
some faraway sun-touched mangrove leaf.
That special marginal area known as the Strand,
where wind, water, and land combine
to create a magical place for breeding wildness,
like an ancient forgotten fencerow,
on the edge of humankind.

Mary Catherine
Oconomowoc

BELUGA

white robed
mona lisa smiling
madonnas of the cold seas
devotees
at play
in the glacial cathedrals
of the Most High
white mala pearls
dancing on the snowy breast
of the Mother
their songs
what are they for us?
of what value the spinning wheels of prayerful Tibet?
of what value the sacred chants
rising from the ashrams of India?
of what value the plainsong
from the austere monasteries of Europe?
of what value the smoky meditations
of the North American sweat lodge?
of what value the mighty voice of the Trappists
breaking silence only for song?
the saddhu
the shaman
Cistercians and Cetaccans
have the world's work to do
singing us out of the Darkest Age
let us save the whale
for she may save the world

Paulette Callen
Nutley



Annotated and Introduced by Dave Foreman

A common refrain among those who value natural diversity is that education is the key to changing Earth-destructive attitudes and actions. Unfortunately, most "environmental education" is mush, and its perpetrators are unwilling to confront controversial issues. To find meaningful environmental education, one must look to the "radical" wing of that field - to Dr. Michael Cohen and the National Audubon Society Expedition Institute, and to Dr. Steve Van Metre and the Institute for Earth Education. These men and their co-workers and programs are to environmental education what Earth First! is to the environmental movement.

It's been my pleasure to meet with Mike Cohen and NASEI on several occasions. (My only complaint is that NASEI wasn't around when I was in high school or college!) A number of NASEI alumni have become key Earth First! activists.

This May, I was invited to speak to the Institute for Earth Education's national conference and to look at some of their programs for elementary, junior high and high school students. Again, I was highly impressed. Here was environmental education that packed a punch and didn't shy away from hard questions or from confronting wrong-headed and damaging behavior patterns and attitudes.

Both Mike Cohen and Steve Van Metre have important books presenting their original and powerful approaches to education. They are listed below in our new books section and I highly recommend them to you.

Again let me put on my huckster's plaid sport coat and give my sales pitch for books and other Earth First! merchandise. The Yule holidays are coming and you need to buy gifts for friends and relatives and - why not? - yourself. You can't buy better Yule gifts than the snake oil and trinkets in these pages for several reasons:

1) The books and music tapes we sell can help fence-straddlers leap into the fray as committed activists who put Earth first!. (Don't forget gift subscriptions to the Earth First! Journal!) What better gift can you give a friend or relative than something which will entertain, enlighten, educate and activate them? Wake somebody up!

2) Earth First! t-shirts and bumperstickers are a great way to spread the EF! message. You'd be surprised at the number of people who have been brought into the EF! movement by seeing one of our t-shirts or bumperstickers.

3) Subscriptions to this newspaper do not quite cover the costs of producing it. Moreover, the EF! Journal sends money to local EF! groups and covers the cost of such things as the Grizzly Bear tabloid (we spent \$3,000 to produce it for the EF! Grizzly Bear Task Force). Sales of books, tapes, t-shirts, hats and other items take up the slack and allow us to continue to publish the best environmental journal in the world. We don't ask for contributions to the Journal, but we do encourage you to buy from us (and to subscribe).

I'm sure that every reader of this newspaper can find the perfect gift for someone in the complete listing of books and music that follows. Don't delay, order today and beat the Xmas mail slowdown.

The following is our complete listing of books and music. You may want to save it for future reference since we generally cannot afford the space to fully describe each. Order books and music from Earth First!, POB 2358, Lewiston, Maine 04241. All prices are postpaid. Good reading!

NEW BOOKS

HOW NATURE WORKS

Regenerating Kinship with Planet Earth

By Michael J. Cohen. This book bridges the gap between scientific and spiritual outlooks. The author's 28 years of experience studying the natural world enables him to reveal how our separation from Nature underlies most of our social ills and prevents us from experiencing Planet Earth as a living organism. Dr. Cohen shows us that the Living Earth's intelligence is not science fiction but a fact of life, a fact which our modern-day upbringing and carefully structured social mores insulate us from knowing or feeling. He also illustrates how the workings of Nature, once recognized, give us excellent instructions for living more harmoniously. Paperback, 263 pages. \$12.50.

THE EARTH SPEAKS

An Acclimatization Journal

Edited by Steve Van Metre and Bill Weiler. This exceptional collection of writings captures Earth's voice and is graced by lovely block prints by Gwen Frostic. Included are selections from Henry David Thoreau, John Muir, Aldo Leopold, Rachel Carson, Sigurd Olson, Gary Snyder, Ed Abbey, Loren Eiseley, Walt Whitman, Byrd Baylor and many others. Paperback, 187 pages. \$10.50.

ON THE BRINK OF EXTINCTION:

Conserving the Diversity of Life

By Edward C. Wolf. This inexpensive chapbook from Worldwatch Institute (Paper #78) is the best summary of biodiversity and conservation biology we have seen. Every EF!er should own a copy and read it. Better yet, get a copy into the hands of your local Sierra Club leaders or your local Forest Supervisor or member of Congress. Paperback, 54 pages, index. \$4.

ZODIAC

The Eco-Thriller

By Neal Stephenson. Here's a fast-paced environmental thriller featuring a New Age Sam Spade and evil polluters in Boston harbor. Wet suits, Zodiac rafts, PCBs, the FBI, a sleazy presidential candidate, and GEE - the Group of Environmental Extremists, produce an east coast version of that novel about George and Bonnie and Paperback, 283 pages. \$9.50.

ENDANGERED RIVERS

And the Conservation Movement

By Tim Palmer. Although dams and other river-destroying projects have played a major role in the history of the conservation movement, the National Wild & Scenic Rivers System is the least known and most neglected of our nation's preservation systems. While there are a number of excellent books about the history of river destruction and "water development" in the United States, none have focused on the effort to preserve free-flowing rivers - until Tim Palmer's exhaustively researched and finely crafted history. This is a necessary addition to the field of conservation history and no wild river lover should be without it. Includes 40 full-color photographs by the author. Paperback, 316 pages, index, references, appendices. \$15.

Among the books that we sell and that we review this issue are Battle for the Wilderness, Mountains Without Handrails, Endangered Rivers, and Sacred Land Sacred Sex. We also print excerpts from Out of Weakness.

NED LUDD BOOKS RELEASES

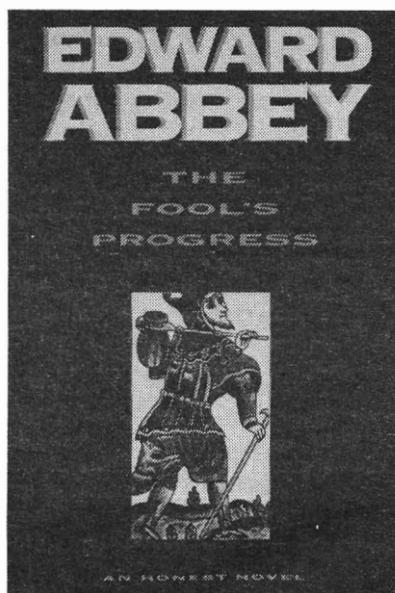
(Published by Ned Ludd Books and available from Earth First! at a 40% discount plus shipping for wholesale orders of 5 or more.)

THE EARTH FIRST! LI'L GREEN SONGBOOK

78 terrific Earth First! songs by Johnny Sagebrush, Cecelia Ostrow, Bill Oliver, Greg Keeler, Walkin' Jim Stoltz and others from Australia and America. Guitar chords are included with most songs. An absolute must for every true-green EF!er to sing along with our minstrels or to play the songs yourself. Dealer inquiries welcome. \$6 postpaid, \$4 postpaid special to Earth First! subscribers only! (\$3 plus shipping for wholesale orders of 5 or more).

ECODEFENSE

"A Field Guide to Monkeywrenching - 2nd Edition" edited by Dave Foreman and Bill Haywood with a Forward! by Edward Abbey. Greatly expanded and revised to 308 pages of detailed, field-tested hints from experts on Tree-spiking, Stopping ORVs, Destroying Roads, Decommissioning Heavy Equipment, Pulling Survey Stakes, Stopping Trapping, Trashing Billboards, Hassling Overgrazers, Leaving No Evidence, Security ... and much more. Heavily illustrated with photographs, diagrams and cartoons. \$13.50 postpaid (\$7.20 plus shipping for wholesale orders of 5 or more).



THE FOOLS PROGRESS "An Honest Novel" by Edward Abbey. Yes, it's finally out! Cactus Ed's first novel since "Good News," "The Fools Progress" is a major work of American fiction. Moreover, Ed has donated 50 copies to us and has signed them as a fundraiser for the EF! Journal. Hardcover, 485 pages, \$22.

DESERT SOLITAIRE by Edward Abbey. A superb 20th anniversary edition of Abbey's masterpiece with stunning illustrations from the University of Arizona Press. This fine hardcover edition is a collector's item and no fan of Abbey should be without one. Signed for Earth First! by Cactus Ed, himself. 255 pages, hardcover, \$28.

THE MONKEY WRENCH GANG by Edward Abbey. No description necessary. Since the hardcover Dream Garden Press edition is out of print, we are offering the super cheap pocket book version of Abbey's rollicking good novel. Ride that slickrock trail once again with Hayduke, Bonnie, Doc and Seldom Seen. Give it to your friends. 387 pages, paperback, \$6.

FREEDOM AND WILDERNESS "Edward Abbey Reads From His Work" 2 cassettes (2hrs. 52 minutes) of Edward Abbey reading selections from his books. Includes Come On In (The Journey Home), Fire Lookout (Abbey's Road), The Dead Man At Grandview Point (Desert Solitaire), Down There In The Rocks (Abbey's Road), Cowboys (Desert Solitaire), Watching The Birds: The Windhover (Down The River), In Defense Of The Redneck (Abbey's Road), Merry Christmas Pigs (Abbey's Road), Freedom And Wilderness, Wilderness And Freedom (The Journey Home), Planting A Tree (Down The River). Hear it from Cactus Ed himself. \$18.50 postpaid first class.

BEYOND THE WALL "Essays From The Outside" by Edward Abbey. Vintage Abbey recounting trips into the wilderness of Arizona, Sonora, Utah, Texas, and Alaska. Paperback, 203 pages. \$9

THE JOURNEY HOME "Some Words in Defense of the American West" by Edward Abbey. Illustrated by Jim Stiles. An anthology of Abbey's best essays in defense of wildness. Includes the classic "Freedom and Wilderness, Wilderness and Freedom." 242 pages, paperback. \$10

SLICKROCK by Edward Abbey and Phillip Hyde. One of the great "coffee table" books of all time in a beautiful new edition from Peregrine Smith. Arresting color photographs of the Utah Canyon Country by Phillip Hyde (with his commentary) and some of Abbey's best prose in celebration of the wild. A collector's prize. Inexpensively priced in sturdy paperback. Oversized 13 1/2" x 10 1/2", 143 pages. \$27

ONE LIFE AT A TIME, PLEASE by Edward Abbey. A new book of essays featuring Cactus Ed at his controversial best with topics including immigration, anarchy, ecodefense, sex, "sportsmen," cowboys, San Francisco and several "travel" pieces. In his "Preliminary Remarks" to this book, Abbey writes, "If there's anyone still present whom I've failed to insult, I apologize." Signed by the author. Paperback, 225 pages. \$9

RESIST MUCH, OBEY LITTLE "Some Notes on Edward Abbey" edited by James Hepworth and Gregory McNamee. Fifteen distinguished writers comment on Edward Abbey as a major American author. Contributors include Wendell Berry, Gary Snyder, William Eastlake, and Barry Lopez. Also includes four interviews with Abbey. 127 pages, paperback. \$9

LAND OF LITTLE RAIN by Mary Austin with an introduction by Edward Abbey. This clear-eyed, lyrical tribute to the desert and foothill lands between Death Valley and the High Sierras was first published in 1903 and has since become an American nature classic. In the nature-writing world where men predominate (what else is new?)

Mary Austin stands with Thoreau, Leopold, Lopez, Abbey, and ... yes ... Rachel Carson. A book all desert rats should read and savor. 107 pages. Paperback, \$8

BLUE DESERT by Charles Bowden. Published by the University of Arizona Press in 1986, this is an eloquent and penetrating study of the darker side of the Sunbelt. One chapter, entitled "Foreman," is about - guess who? Belongs on the shelf next to Abbey's "Desert Solitaire." Hardcover, 178 pages, \$19.50

FROG MOUNTAIN BLUES by Charles Bowden with photographs by Pulitzer Prize winning photographer Jack Dykinga. A stunning discussion in prose and photography of the Catalina Mountains outside of Tucson, and of the interaction between wilderness and the city. Although published by the University of Arizona Press, Bowden's proposals are as radical as Earth First!. "... a case history of how America destroys itself." - Gary Snyder. 16 full page color photos, many b&w. Hardcover, 165 pages. \$22.50

KILLING THE HIDDEN WATERS "The Slow Destruction Of Water Resources In The American Southwest" by Charles Bowden. Ed Abbey calls Bowden the "best social critic and environmental journalist now working in the American southwest." This important study examines groundwater depletion in southern Arizona and the Ogallala aquifer by European cultures and the earlier efforts by the Pima/Papago and Comanche to live in harmony with their dry lands. Reviewed in Samhain 86 EF!. Paperback, 206 pages, 36 photos, 6 maps, \$9

THE GRIZZLY IN THE SOUTHWEST

"Documentary of an Extinction" by David E. Brown, with a foreword by Frank C. Craighead, Jr. Brown, retired from the Arizona Game & Fish Department and founder of the Arizona Bear Society, traces in accurate detail the extirpation of the Grizzly from Arizona, New Mexico, southern Colorado and northern Mexico. If you want to see the Grizzly in the Southwest again, read this book to understand why we destroyed it once. But get it quick, as it is almost out of print! Reviewed in Lughnasadh 86. 274 pages, references, appendices (including an evaluation of the Gila Wilderness for Grizzly reintroduction), maps, many photos, hardcover. \$22.

THE WOLF IN THE SOUTHWEST

"The Making of an Endangered Species" David E. Brown, editor. Defenders of Wildlife says, "This well-researched and readable book tells the story of the building of a federal bureaucracy devoted to the killing not only of wolves but also of mountain lions, bears and other predators. ... also valuable for its information on the life history of the wolf and for the colorful accounts of several famous wolves that long evaded traps and poisons." Crucial reading for those interested in returning the wolf to the Southwest. 195 pages with a bibliography and index, photos, maps, charts. University of Arizona Press. Paperback. \$11

STATE OF THE WORLD 1988

"A Worldwatch Institute Report on Progress Toward a Sustainable Society" by Lester R. Brown et al. The annual "State of the World" is a progress report on our destruction of the biosphere and a fine companion to the above two classics. John Davis says, "For a good time, lock yourself in a dingy room with a candle, a bottle of Ripple and this book." Chapters include fossil fuel impact on climate, reforestation prospects, mass extinctions, toxics from agriculture and industry, family planning, and Star Wars. You'll hope Reagan ... naw, no one can hope that ... you'll hope Gorbachev, Dukakis, Bush, etc. read this book. It is a small breath of sanity in this mad world. 237 pages, index, references, paperback. \$12.

TOPSOIL AND CIVILIZATION

Revised edition, by Vernon Gill Carter and Tom Dale. This broad human history makes a convincing case that civilizations rise and fall according to their use or abuse of topsoil. The condition of the land is traced from Egypt, Mesopotamia, Crete & Lebanon, Syria & Palestine, Greece, North Africa, Rome, and Western Europe to the United States. With all our understanding of history and ecology, the modern world is making the same mistakes the first agricultural societies made thousands of years ago. And we name ourselves "sapiens" - wise. Read this book; laugh or weep. 292 pages, index, many maps and b & w photos, paperback. \$13.

OVERSHOOT

"The Ecological Basis of Revolutionary Change" by William R. Catton, Jr. I was unaware of this seminal book until the folks at Fifth Estate brought it to my attention. I agree with Vine Deloria, Jr. who writes about it: "One of the most important books I have read in my lifetime." Catton lucidly applies ecological concepts to the human condition, and coins piercing new terms to describe our situation ("Cargoism: delusion that technology will always save us from Overshoot: growth beyond an area's carrying capacity, leading to Crash: die-off.") This is admittedly not a happy book, but Catton expertly demolishes the fantasies of the Cargoists, Cosmeticists, Cynics, and Ostriches to

demonstrate that we have indeed surpassed our carrying capacity. After Aldo Leopold's *A Sand County Almanac*, this is the book I most strongly recommend. (If you believe the humanist bunk that Malthus is wrong, you definitely need to read it!) Index, glossary, references, 298 pages, paperback, \$12

THE PATHLESS WAY Michael Cohen's tender yet critical, academic yet passionate, intellectual biography of John Muir. Unlike all other works on Muir, this exceptional book focuses on his ideas and their evolution, and ties Muir to Deep Ecology. With a Ph.D. in Literature, an impressive mountaineering record in the High Sierra, and stature as one of the leading exponents of Deep Ecology, Cohen is uniquely qualified to have written this most important book. Heavily footnoted. Paperback, \$14.50

ECOLOGICAL IMPERIALISM "The Biological Expansion of Europe, 900 - 1900" by Alfred W. Crosby. Why has Europe been so successful during the last thousand years? Crosby, a prominent University of Texas history prof, synthesizes old and new information, to at last answer this key question of recent history. He argues that the Azores/Canaries, North America, Argentina, Australia and New Zealand have become "Neo-Europes" through a combination of European people, disease, domesticated plants and animals, pests and weeds. Indeed, he convincingly argues that it was not military or economic might (or ideology) so much as biology that Europeanized these lands. This book is a first step toward a history of the world environment and shows how the environment is a continual and active participant in human affairs. Fascinating! Index, references, maps, illustrations, paperback, 368 pages, \$13

SIMPLE IN MEANS, RICH IN ENDS "Practicing Deep Ecology" by Bill Devall. Devall's new book follows up on "Deep Ecology" (which is one of the most popular books we offer) with this broad-based study of how to cultivate a Deep Ecology life style. Reviewed in *Mabon* 88. Paperback, 224 pages, bibliography, \$12.50

DEEP ECOLOGY "Living As If Nature Mattered" by Bill Devall and George Sessions. This groundbreaking book presents the philosophical fundamentals for the defense of Earth, discussing biocentrism, intrinsic value, and ecological resisting. Appendices by Dolores LaChapelle, Gary Snyder, John Seed, Carolyn Merchant, Robert Aitken, and Arne Naess. 263 pages, paperback, \$11.50

THE ARROGANCE OF HUMANISM by David Ehrenfeld. Ehrenfeld is a Professor of Biology and one of the founders of the Society for Conservation Biology. In this powerful book, he explodes the myths of humanism (the dominant world-view) such as "all problems are soluble by people using either technology or social sciences; resources are either infinite or have infinite substitutes; human civilization will survive." He demonstrates the problems of rationality, argues convincingly for emotion, and then moves to analyze arguments for the preservation of natural diversity and concludes that only those based on intrinsic value, and not economics or human benefit, are valid and even politically practical. As with Catton's book, the Christians, Marxists and capitalists will howl, but he's right on all counts. This is an absolutely fundamental book for Earth Firsters. Index, references, 286 pages, paperback, \$12.50

THE NATURAL ALIEN "Humankind and Environment" by Neil Evernden. This is one of the seminal books of deep ecology, and has been called "a brilliant, difficult, passionate assault on the dominance of economic - in fact of western - thinking." Reviewed in *Mabon* 85 and *Eostar* 88. 160 pages, index, paperback, \$14

TROPICAL NATURE "Life and Death in the Rain Forests of Central and South America" by Adrian Forsyth and Ken Miyata. This is a modern classic of natural history which brings the incredible diversity and beauty of the tropical rainforest alive on every page. Although it is not directly about preservation of the rainforest, it provides some of the best ammunition for preservation simply in its descriptions - all from a deep ecological perspective. If you are fighting for the rainforest, read this book so you will better understand the wild diversity for which you do battle. If you plan to visit the rainforest, read this first. 248 pages, index, bibliography, paperback, \$9

THE AMERICAN CONSERVATION MOVEMENT "John Muir and His Legacy" by Stephen Fox. Both a history of the conservation movement and an insightful new biography of John Muir, this book is crucial to understanding the environmental movement. Fox's thesis is that the history of conservation can be told as the ongoing struggle between passionate amateurs (John Muir) and conservative resource professionals (Gifford Pinchot). Well-written, heavily footnoted, with photographs, paperback, 436 pages, \$16.50

STERILE FOREST "The Case Against Clearcutting" by Edward C. Fritz. Ned Fritz, "The Father of Texas Wilderness" and founder of the Texas Committee on Natural Resources, details his campaign in and out of the courts to halt the Forest Service's arrogant schemes to turn the diverse deciduous forests of east Texas into sterile pine plantations. A key book for understanding the insouciant and corrupt United States Forest Service of today. Reviewed in *Litha* 84. Paperback, 271 pages. B & W photos. Special discounted price of \$6.50

TAME WILDERNESS by Dennis Fritzing. An excellent little volume of poetry inspired by the wilderness and penned by a long active Bay Area Earth Firster. Paperback, \$6

PROMISED LAND "Adventures and Encounters in Wild America" by Michael Frome. An inspiring chronicle of forty years of meeting important conservationists in America's wildest places by the foremost environmental journalist in the United States. Mark Dubois, Sig Olsen, William O. Douglas, Martin Litton and others, in the Grand Canyon, Yellowstone, Boundary Waters, Smokies, Maine Woods, and elsewhere. Reviewed in *Litha* 86. Hardcover, 312 pages, originally priced at \$18.95. Signed by Mike Frome. \$12 as a special for EF'ers.

WHOSE WOODS THESE ARE "The Story of the National Forests" by Michael Frome. This history of the National Forests and a profile of representative Forests was originally published in 1962. This is a reprint by Westview Press and is signed for Earth First! by Frome. Includes a

current preface. An important work for understanding the Forest Service of today by the leading conservation journalist of our time. Through a special arrangement with the author, we are able to offer this book for substantially less than the cover price. 360 pages, index, paperback, \$10

BATTLE FOR THE WILDERNESS by Michael Frome. This extremely important book by America's leading environmental journalist is quite simply the history of the political struggle to preserve the American Wilderness. We can learn much from the struggles of the past and apply such lessons to good advantage in our struggles today. Frome's book was originally written for The Wilderness Society in the mid-1970s. We are offering a reprint from Westview Press at a considerable discount from their regular price, thanks to Mike's generosity and our desire to get this into the hands of more EF'ers. A new preface updates it. Paperback, 240 pages, references, index, \$20

A WILDERNESS ORIGINAL "The Life of Bob Marshall" by James M. Glover. Bob Marshall is responsible for preserving more Wilderness than any other single person; his hikes of 50 or even 70 miles in a day are legend; he was perhaps the last great explorer of unknown Alaska; yet he remains the least known of the wilderness titans of American history and an enigma to those who know of him. This book, published by the Seattle Mountaineers, is the first biography of Bob and well worth reading to acquaint oneself with one of the greatest Americans of our century, who also happened to be one of the most charming and personable members of the New Deal. 323 pages, index, many b & w photos, hardback, \$20.50

CRY WOLF! by Robert Hunter and Paul Watson. A stirring report from two of the founders of Greenpeace about the courageous efforts of Project Wolf in British Columbia to stop the demented wolf extermination campaign of the BC government. Reviewed in *Samhain* 85 *Earth First!*. 130 pages, paperback, \$9

THE GIFTING BIRDS "Toward An Art Of Having Place And Being Animal" by Charles Jones. This excellent volume of essays from Dream Garden Press deals with that most important need of our modern world - a sense of place. Reviewed in *Eostar* 86 *Earth First!*. Hardcover, 158 pages, \$18.50

FEAR AT WORK "Job Blackmail, Labor and the Environment" by Richard Kazis and Richard L. Grossman. Are jobs and environmental protection incompatible? Blowing apart the economic myths that have put labor and environmentalists at odds with telling anecdotes, careful history and social analysis, the authors make a powerful argument for greater cooperation between the labor and environmental movements. Both authors were founders of Environmentalists for Full Employment. Grossman has also been Executive Director of Greenpeace and is a constant and constructive critic of cooption and compromise by the big national environmental organizations. See Edward Abbey's review in *Beltane* 88. Paperback, 306 pages, index. Special discounted price of \$9.50

AMERICAN FALLS by Greg Keeler. Greg is well known to Earth Firsters through his music tapes (see *EF!* Music) and his performances at the Round River Rendezvous and other events. This fine volume of poetry has the same bite and sparkle that his songs do. 100 pages, paperback, \$9.50

EARTH FIRST "The Struggle to Save Australia's Rainforest" by Jeni Kendell and Eddie Suivids. Based on the fine television documentary of the same name by Jeni Kendell and John Seed, this beautiful book documents the campaign to preserve the rainforests of Australia through non-violent direct action - Terania Creek, the Nightcap, the Franklin River, Cape Tribulation and the Daintree. Many carefully-reproduced color photographs of rainforest as well as maps and photos of the actions. This book is a major historical document of the radical conservation movement, and a source of inspiration to tree-huggers everywhere. 167 pages, hardcover, \$25

SACRED LAND SACRED SEX: "Rapture of the Deep" by Dolores LaChapelle. I would argue that Dolores LaChapelle is the most creative and insightful deep ecologist writing today. Many of us have long awaited her new book, and it fulfills our expectations. Reviewed in this issue. Oversized, soft cover, \$24.50.

EARTH WISDOM Dolores LaChapelle's provocative and inspiring masterpiece. We will free ourselves and the land by learning how nature intended us to live. This book provides both the necessary background and the practical steps to begin learning how to "reinhabit" your place on Earth. Fully illustrated. Large format paperback. Reviewed in *Samhain* 85. \$15.50

BEAR MAGIC A chapbook by the National Grizzly Growers featuring poems by Gary Lawless, Leslie Marmon Silko, James Koller, and Kate Barnes; art by Stephen Petroff; and interviews with Doug Peacock, Dave Foreman, and Lance Olsen. All proceeds to the Bear. \$3.50

ALWAYS COMING HOME by Ursula K. LeGuin. This is perhaps the finest ecotopian novel yet written. In it, LeGuin describes two cultures surviving in Northern California after a catastrophe has destroyed Western Civilization. In portraying one as a peaceful and technologically simple culture, and the other as a technologically-oriented and war-like society, LeGuin makes subtle yet profound statements about humanity and its relation with technology and with nature. Paperback, 562 pages, \$6

A SAND COUNTY ALMANAC by Aldo Leopold. This environmental classic was selected by more reviewers in *Sierra* magazine's recent overview of significant environmental books than any other. In that article, I called it not only the most important conservation book ever written, but the most important book ever written. I stand by that today. Paperback, 226 pages, \$9.00

COMPANION TO A SAND COUNTY ALMANAC "Interpretive & Critical Essays" edited by J. Baird Callicott. Aldo Leopold perhaps thought harder than anyone else in 20th century America about wilderness and our relationship to it. His posthumously published book *A Sand County Almanac* ranks as the finest discussion of conservation ever written. In this collection of essays by leading historians and conservation thinkers, Professor Callicott has produced a sustained study of Leopold from perspectives of art, philosophy, history and social commentary.

Although parts of the book are weak (the professional philosophers in it sorta wimp out) it is, nonetheless, an excellent book for better understanding Leopold. Paperback, 308 pages, \$14.50

ARCTIC DREAMS by Barry Lopez. Another masterpiece from the author of "Of Wolves and Men." America's finest naturalist explores the Arctic with a poet's sensitivity. Reviewed in *Samhain* 87. Paperback, 417 pages, index, maps, \$6

OF WOLVES AND MEN by Barry Holstun Lopez. An unprecedented blending of natural and social history, Lopez explores the world of the wolf and where it touches the world of humans, with a poet's eloquence and understanding. One of the finest natural history books ever written. Reviewed in *Eostar* 88. Illustrated, 309 pages, paperback, \$16.50

THE SNOW LEOPARD Peter Matthiessen's extraordinary journal of his fall journey in the Himalayas with zoologist George Schaller in search of the elusive and endangered Snow Leopard, and in search of himself after the death of his wife from cancer. Paperback, \$5

NEVER CRY WOLF by Farley Mowat. One of the all-time nature and conservation classics. The adventures of a young Canadian biologist investigating Gray Wolves and Caribou in the Arctic. Adapted for the Disney movie a couple of years ago. Paperback, 164 pages, \$4.50

SEA OF SLAUGHTER by Farley Mowat. A landmark study of the historic and on-going destruction of wildlife (seabirds, other birds, bears, wolves, fish, whales, seals) along the northern Atlantic seaboard of North America. *USA Today* says that "Sea of Slaughter deserves to stand with Rachel Carson's *Silent Spring* as an outstanding indictment of man's stupidity in alienating himself from nature." Paperback, 437 pages, \$11.50

A WHALE FOR THE KILLING by Farley Mowat. A real-life story about the struggle to save a Fin Whale trapped in a Newfoundland lagoon and tortured by local villagers for "recreation." Paperback, 213 pages, \$5.00

THE DESERT SMELLS LIKE RAIN "A Naturalist in Papago Indian Country" by Gary Paul Nabhan. Gary is one of the leading desert ethnobotanists in the world, as well as one of finest writers of natural history today. In this North Point Press reprint of his classic first book, Gary journeys with the Papago through the Sonoran Desert in Arizona and Mexico, exploring their close relationship with the land. Reviewed in *Samhain* 87. B & W photos, 148 pages, heavy duty paperback, \$10

GATHERING THE DESERT by Gary Paul Nabhan with illustrations by Paul Mirocha. If you love the Sonoran desert, you have to have this superbly written and illustrated book describing the natural history and human uses of the key plants of the Sonoran Desert. Destined to be an American nature classic. Nabhan is a careful observer of the desert, an exquisite writer with a fine sense of humor and place, a dedicated conservationist, and one of the world's leading ethnobotanists. Reviewed in *May 1986 Earth First!* 209 pages. Now in paperback, \$16.50

WILDERNESS AND THE AMERICAN MIND Roderick Nash's peerless history of American attitudes toward the wilderness. Perhaps the most important book available for understanding the dynamic interplay between humans and nature in the New World. Now in an expanded, revised 3rd edition with greater emphasis on Deep Ecology. A must for every conservation bookshelf. Reviewed in *Eostar* 88. Paperback, index, 425 pages, \$13.50

REFORMING THE FOREST SERVICE by Randal O'Toole. As Director of CHEC (Cascade Holistic Economic Consultants), O'Toole has been a continual thorn in the side of the Forest Service. The reason is simple: he's smarter than they are and has relentlessly exposed and dissected inefficiency, incompetence, and stupidity in their planning and operating. In this ground-breaking book, he proposes sweeping reforms in the structure of the agency and new budgetary incentives as the best way to improve management. This book is a must for serious EF! National Forest activists, even though they may not agree with all of it. 250 pages, graphs, tables, notes. Paperback, \$18.50.

DOLPHIN LEAPING IN THE MILKY WAY by Jeff Poniewaz. There are many poets in the Earth First! tribe and Jeff Poniewaz is one of the best. This is a collection of Jeff's finest eco-poems. See the review of "Dolphin" by Lone Wolf Circles in *Mabon* 87. Paperback, 145 pages, \$8

JAGUAR "One Man's Struggle to Establish the World's First Jaguar Preserve" by Alan Rabinowitz. An outstanding book of conservation and adventure about the author's attempts to save the Jaguars in Central America's tiny country of Belize. 32 pages of color and b&w photographs. Hardcover, index, 368 pages, \$22.50

CADILLAC DESERT "The American West and Its Disappearing Water" by Marc Reisner. Meticulously researched and remarkably readable, this is the epic story of America's water "development" and a fine history of the Bureau of Reclamation and the Army Corps of Engineers. It features engineering "triumphs" and dam failures, irrigated deserts and poisoned water tables, along with a cast of thousands, ranging from thugs like William Mulholland who brought Los Angeles water from the Owens Valley, to evil bureaucrats like Floyd Dominy who literally screwed himself out of his job as Commissioner of Reclamation, to phony environmental politicians like Mo Udall, Cecil Andrus and Dick Lamm, to heroes like David Brower. An essential primer for anyone interested in Western water issues (reviewed in *EF!*, *Litha* 1987). Paperback, 582 pages, \$11

FOREST RESOURCE CRISIS IN THE THIRD WORLD From Sahabat Alam Malaysia (Friends of the Earth Malaysia). The proceedings from the Conference on Forest Resources Crisis in the Third World provide a comprehensive and powerful overview of tropical timber cutting. All Tropical Rainforest activists should get a copy of this report. Illustrated, 510 pages, paperback. Proceeds to SAM, the leading conservation group in the Third World. \$20.

MOUNTAINS WITHOUT HANDRAILS "Reflections on the National Parks" by Joseph L. Sax. A modern conservation classic by a law professor from the University of

California. Roderick Nash says, "Sax has drilled to the core the most important question facing the national parks of today." This is one of the most far-reaching defenses of the preservationist position on National Parks. Required reading for National Park activists. 152 pages, paperback, index, \$9.50

OUT OF WEAKNESS "Healing the Wounds That Drive Us to War" by Andrew Bard Schmookler. Schmookler's previous book, "Parable of the Tribes," was a study of the origins of conflict between groups of people. In this follow-up study, he considers the human psyche and its relation to war and violence. Excerpted in this issue. Andy is a frequent contributor to this journal, and always controversial. 320 pages, paperback, \$13.

PARABLE OF THE TRIBES by Andrew Bard Schmookler. A provocative and original thesis on the origin of war and aggression in human society, with special application to environmental problems. Reviewed in *Mabon* 85 and followed with replies from Schmookler and various replies to Schmookler on the question of anarchy. Read the book that started the debate. Paperback, index, 400 pages, \$11.50

DESERTS ON THE MARCH Fourth edition by Paul B. Sears. Prof. Sears was one of America's best known botanists. In this American conservation classic, he asks the question, "Is the human race digging its own grave in North America?" He discusses the destruction of virgin prairie, the despoiling of natural waterways, the hewing down of great forests, the indiscriminate killing of wildlife. "Man has become the sponsor of a biological experiment without known parallel in the history of the earth. . . He no longer accepts . . . the pattern in which he finds himself, but has destroyed that pattern and from the wreck is attempting to create a new one. That, of course, is cataclysmic revolution." 264 pages, index, hardcover, \$20.

THINKING LIKE A MOUNTAIN "Towards a Council of All Beings" by John Seed, Joanna Macy, Pat Fleming and Arne Naess. Illustrated by Dailan Pugh. This book of readings, meditations, poems, rituals and workshop notes prepared on three continents helps us remember that environmental defense is nothing less than "Self" defense. Including magnificent illustrations of flora and fauna from the Tasmanian rainforest, this book provides a context for ritual identification with the natural environment and so invites us to begin a process of "community therapy" in defense of Earth. Facilitating a process for allowing us "to hear the sound of the earth crying" as our own cry, it is an important deep ecology educational tool for use in schools, community groups and elsewhere for personal reflection. 128 pages, references, paperback, \$9.50

CONSERVATION BIOLOGY "An Evolutionary-Ecological Perspective" edited by Michael E. Soule and Bruce A. Wilcox. An anthology of important papers by leading researchers in four parts: Ecological Principles of Conservation, Consequences of Insularization, Captive Propagation and Conservation, and Exploitation and Preservation. Raymond Dasmann writes, "I believe *Conservation Biology* is one of the most important books on conservation that is now available. Iad my way it would be required reading for everyone actively concerned with conservation." If you want the best scientific ammunition for a preservationist point of view, here it is - fully loaded. 395 pages, index, bibliography, paperback, \$26.50

CONSERVATION BIOLOGY "The Science of Scarcity and Diversity" edited by Michael E. Soule. This is a follow-up to the previous "Conservation Biology" (see above) and is just as important with 25 chapters by leading experts covering Fitness & Viability of Populations, Patterns of Diversity and Rarity: Their Implications for Conservation, The Effects of Fragmentation, Community Processes, Threats and Management of Sensitive Habitats and Systems, and Dealing With the Real World. A must for serious defenders of natural diversity. 584 pages, index, bibliography, paperback, \$30.50

THE OLD WAYS Gary Snyder's remarkable volume on reinhabitation. "The wisdom and skill of those who studied the universe first hand, by direct knowledge and experience, for millennia, both inside and outside themselves, is what we might call the Old Ways." Six approaches to the old ways via poetry, myth, and sense of place. Paperback, 96 pages, \$5.50

THE SPIRAL DANCE by Starhawk. Arguably the best book on neo-paganism. Includes a lucid, sensible discussion of Goddess worship as well as visualization exercises, spells, rituals, etc. This isn't some weird eco-la-la tract, it's the best religious book since the burning times. Paperback, 218 pages, \$12

THIS IS DINOSAUR "Echo Park Country and Its Magic Rivers" edited by Wallace Stegner. The modern environmental movement was born in the fight in the early 1950s to stop a giant dam on the Yampa and Green Rivers in Dinosaur National Monument. This book, originally published by Alfred A. Knopf in 1955, was one of the most effective tools of that battle. It has been reprinted in a fine new edition by Boulder publisher Roberts Rinehart with a new Foreword by Wallace Stegner and an excellent selection of b & w photographs. Writers include Stegner, Olaus Murie, Joseph Penfold, and Otis "Dock" Marston. 93 pages, medium format, paperback, \$10

THE WHISPER BEHIND THE WIND by Walkin' Jim Stoltz. A collection of poetry by a longtime EF! musician. These are words inspired by open skies, wild creatures, and cross-country hikes longer than most of us will ever attempt. Songs from the heart and the land. Paperback, 44 pages, \$7.50

WALDEN by Henry David Thoreau with a major introductory essay by Edward Abbey - "Down The River With Henry Thoreau." Paperback, 303 pages, \$7.50

WILDERNESS VISIONARIES by Jim Dale Vickery. John Davis reviewed this fine book in the *Brigid* 87 issue, calling it "one of the more enjoyable explorations of the lives of great ecologists ever to appear in print." Vickery, canoe guide and writer from the Boundary Waters, explores man's hunger for wild country by examining the lives of six wilderness legends: Henry David Thoreau, John Muir, Robert Service, Robert Marshall, Calvin Rustrum and Sigurd Olson. 263 pages, index, bibliography, paperback, illustrated, \$12.



NEW EF! MUSIC OFFERINGS

Greg Keeler "Post-Modern Blues"

Ohmigod, he's back. Yep, Greg motored down from Montana to Sid's studio in Nevada City again and look what he came up with - a new album. This one is as bad and irreverent and outrageous as the other three and you won't want to be without it. You might even want to give it to someone for a Yule present. It features: P-U-B-L-I-C L-A-N-D-S, Post-Modern Romance, Swiss Army Beatitudes, Post-Modern Blues, Rain Forest Rider, Give Us Fiber, Gone Gone Gone, Favorite Baits, Confession of the Born Again Purist, Bunny Hell, Ryegate Montana Testicle Festival, Wildlife Show Narrative, Lament of the Laundromat, Lady Please Drive Me Back To Oklahoma 'Fore I'm Driven To Tears. \$9 postpaid.

Mark Graham "Natural Selections"

Imagine our surprise to find another musician recording songs as weird and misanthropic as some of the other stuff we sell in this corner. If you've listened to Dakota Sid in person or on tape, you've heard one of Mark Graham's songs - "Their Brains Were Small and They Died." Well, we knew we had to sell Mark's tape or some of you would lynch us. Here it is, and I guarantee you won't be disappointed. Selections include: I Can See Your Aura (And It's Ugly), I'm Working On The Food Chain, Have A Nice Day, Life Is Hard When You're Dumb, Their Brains Were Small and They Died, The Big Band Theory, Veal Life Blues, and several others. \$9 postpaid.

OLD FAVORITES

Austin Lounge Lizards

"Highway Cafe of the Damned"

They're back! The Lizards drop to new depths with their second tape featuring the title song; Cornhusker Refugee; Industrial Strength Tranquilizer; Wendell The Uncola Man; Acid Rain; I'll Just Have One Beer; Dallas, Texas; The Ballad of Ronald Reagan; When Drunks Go Bad; Jalapeno Maria; Get A Haircut, Dad; The Chester Nimitz Oriental Garden Waltz. \$9 postpaid.

Austin Lounge Lizards

"Creatures From the Black Saloon"

Marvelous country satire, superbly produced. Includes smash songs such as: Saguaro; Pflugerville; Anahuac (with Jerry Jeff Walker); Kool-Whip; Chester Woolah; Hot Tubs of Tears; Old & Fat & Drunk; The Car Hank Died In; and much more. \$9 postpaid.

Darryl Cherney

"I Had To Be Born This Century"

Darryl is a singin' fool and organizing dynamo who has taken the North California Coast by storm and earned the eternal enmity of Charlie Hurwitz and MAXXAM. His first smash album includes: Earth First!; Where Are We Gonna Work When The Trees Are Gone?; Chernoble Blues; My Stereo Comes From Japan; It's CAMP; Eel River Flood Of '86; Give 'Em Hell, Sally Bell; Big Mountain Will Not Fall; Dave Foreman Called On The Ice Age This Year; Mosquito Party; and more! Liner notes with words included. \$9 postpaid.

Lone Wolf Circles "Full Circle"

A poetic journey into the artist's magical worldview, set to the music of man and the music of nature. A return to awareness and sensitivity, to our wild and true selves, alive and free. Gary Snyder says "Full Circle is a surprising experience; archaic, fresh, future; wild, refined, all at once. Which should be no surprise - that's how the real world is - my respects to Lone Wolf Circles." 27 poems. \$10 postpaid.

Lone Wolf Circles "Tierra Primera"

Live recordings of the Deep Ecology Medicine Show featuring Wolf's primal poetry backed by a variety of musicians. Well engineered, this tape captures the spirit of a road show and makes you want to go out and do something. \$10 postpaid.

Dakota Sid "... For The Birds"

You've enjoyed the heart-stirring songs of Dakota Sid at the Round River Rendezvous. Now you can purchase his cassette featuring For the Birds, Eagle Song, High Flyin' Tune, Endangered Stranger, The Condor at the Western Gate, Runnin' with the Moon (Owl Song), and Hawks & Eagles. This one's for the birds - and all you bird lovers, too. \$10 postpaid.

Dakota Sid "No Mercy"

Dakota Sid's latest (and best!) album features the powerful song, "Greenfire" created on EF! roadshows along with the hit of the '87 Round River Rendezvous "It's All Bullshit!" Also includes Their Brains Were Small And They Died, It's All Right Kid, Expanding Universe, Redwood, 2187, The Seed, Smoke, No Mercy, Trouble Deep, and Nirvana City Blues. \$10 postpaid.

Greg Keeler "Songs of Fishing, Sheep and Guns in Montana"

Greg Keeler's marvelously satiric first album pokes fun at everything worth poking fun at in the West. Includes: Ballad of Billy Montana, I Don't Waltz (And She Don't Rock'n'Roll), Drinkin' My Blues Away, Miles City Buckin' Horse Sale, Latter Day Worm Fisherman, Fossil Fuel Cowboy, Montana Cowboy, Cold Dead Fingers, Last Great American Cookout, I Call My Mama Papa, Good Morning Sailor, Make Bucks Get Rich, Roll On Missouri. \$9 postpaid.

Greg Keeler "Talking Sweet Bye & Bye"

Greg's encore and just as biting. Includes Little Bitty Bugs, There'll Come A Revolution, Talking Sweet Bye & Bye, Facilitators From The Sky, Talking Interface Blues, Old Friends And Lovers, Big Budget Woman, Church Bells, Ski Yellowstone, Idaho, Death Valley Days, Dark Clouds. \$9 postpaid.

Greg Keeler "Bad Science Fiction"

Keeler returns with an all new album: Bad Science Fiction, Cow College Calypso, Do Not Ask, Montana Banana Belt Cowboy, Nuclear Waste Blues, Is The Ouzie Stupid?, If Bears Could Whistle, Nuclear Dioxin Queen, What's Left Of The West, Ode To Rough Fish, Take Me Back, Duct Tape Psalm, Modern Problems Dancing. \$9 postpaid.

Famed folksinger Burl Ives has said, "The best cowboy singer I know is a girl, Katie Lee." Katie Lee is a superb folk song historian and interpreter, a fine musician, a former actress, a pioneer river runner (the 3rd woman to run all of Grand Canyon), a fighting conservationist (she was one of the few fighting the construction of Glen Canyon Dam), and one of the few of whom it can be honestly said - a legend in her own time. We're proud to offer four of Katie's fine folk cassettes.

Katie Lee "Colorado River Songs"

Ed Abbey writes of this classic collection of music, "Anyone who loved the living Colorado River (pre-damnation by the swine who run America) will love these songs by pioneer Glen Canyon, Katie Lee."

And Katie writes, "In the late '50s and early '60s, protesting anything the Wreck-the-Nation-Bureau did to our rivers was like putting out a forest fire with an eyedropper. Nobody was listening. The fact that NOW the Barry Goldwater and Stewart Udall types are 'sorry' doesn't make me feel one bit better - their gross mistake is still my sorrow. GLEN CANYON IS GONE and will stay gone until someone blows up that heinous dam or the great old Colorado gets made enough to kick its ass downstream. Most of these songs were written before, and in protest of, those life-killing plugs and have survived to be added to, re-arranged and parodied by river runners. A few are new. They are LOVE SONGS to a truncated Grand and to those glorious canyons over whose bones the unenlightened multitudes race on a freeway of stagnant water." \$12 postpaid.

Katie Lee "Fenced!"

Twelve new songs about the old West, written in the folk tradition. These songs remind us of some of the things we should try to keep from slipping away. Includes: Wreck-The-Nation Bureau Song; Bert Loper; Ridin' Down The Canyon; Fenced; and others. 60 minute cassette. \$12 postpaid.

Katie Lee

"Ten Thousand Goddam Cattle"

28 spirited songs about an older and disappearing West. Includes: A Cowboy's Prayer; Old Dolores; The Last Wagon; Dobe Bill; Jose Cuervo; Empty Cot in the Bunkhouse; The Ballad of Alferd Packer; and more. 90 minute cassette. \$14 postpaid.

Katie Lee

"Love's Little Sisters"

17 heart-tugging, poignant, yet tasteful ballads about the souls, lives and loves of women who made The West and its men! Includes: House of the Rising Sun; The Sisters of the Cross of Shame; The Hooker (written by Tom Paxton); Casey's Last Ride (written by Kris Kristofferson); The Flower of Virginia City Fire Company; and more. \$12 postpaid.

Dana Lyons "Animal"

Dana's long-awaited second tape is finally out. For anyone who has heard him at a RRR, you know he's one of the finest musicians and songwriters in the country. For those of you who haven't heard him yet, you'll just have to buy this tape. Includes: RV, Building One in My City, I Am an Animal, I Saw His Body, Music Off the Moonlight, Kevin's Song, Tell Me That You Want To Go, Timebomb, June Is A'Comin', and The Tree. \$11 postpaid.

Dana Lyons

"Our State is a Dumpsite"

A short but powerful cassette by Washington State environmental singer/songwriter Dana Lyons. Includes title song, The Company's Been Good to Me, The Stars Will Always Move, and Drying Tears. \$6 postpaid.

Mokai "Clearcut Case Of The Blues"

Mokai is an original EF! tree-climber and accomplished blues guitar picker. His first album includes: California Conder; Goin' To The Wilds; Wild Places; Springhead Blues; Pollution Blues; Clearcut Case Of The Blues; Goddamn The Forest Service; Earth First! Now (What Did I Say?). \$9 postpaid.

Bill Oliver "Texas Oasis"

Bill Oliver's first inspiring, witty and rollicking album. Includes: Texas Oasis; Pretty Paper, Pretty Trees; If Cans Were Nickels; Shopping Maul; Village Creek; Holes; Snail Darter March; River Libber; Have to Have a Habitat; and lots more! \$9 postpaid.

Bill Oliver & Friends

"Better Things To Do"

Bill Oliver has rearranged his fine "Better Things To Do" cassette with the addition of several new songs including Turtle Island; Champ! (with the Austin Lounge Lizards); and Rio Grande Valley. Also includes Muir Power To You; Better Things To Do; Get Along Litter Dogies (with Jerry Jeff Walker); Pine Away Pine Bark Beetle; Grand Canyon Rendezvous (by Glen Waldeck); When I Look Into The Sky; and more. \$9 postpaid.

Cecelia Ostrow "All Life Is Equal"

Cecelia has one of the most beautiful voices in music today. The lyrics and music to her songs are haunting and profound. Includes: Sweet Oregon Home; Water; Wild Things; Forest Song; I Feel the Forest; Time in the Forest; and more. \$8.50 postpaid.

John Seed, Bahloo & Friends "Earth First!"

From Australia, John has done more to launch the global rainforest movement than has any other single person and has become one of the leading developers of the Deep Ecology philosophy. His first album of Aussie music includes: Extinction, Handful Of Timber, Ballad Of Mt. Nardi, The Water Song, Tonka Toys, Solomon Island, Killing Of The Trees, The Future Is In Our Hands, and more. \$9 postpaid.

Rainforest Information Centre "Nightcap"

An outstanding one hour long documentary of the successful defense of the Nightcap Rainforest in Australia in 1979. One half music including "Take Your Bulldozers Away," "Tonka Toys," and other great Australian environmental songs. The rest of the tape is live action recording from the blockade. \$10 postpaid.

Jon Sirkis "A Few Less Colors"

Lone Wolf Circles reviewed Jon Sirkis' debut album in EF!, writing, "It is popular for its funny political ramblings, tunes that seem to have hitchhiked here from the sixties, the soles of their feet black from walking city sidewalks and kicking idealistic coals back into the philosophical fire." \$9 postpaid.

Walkin' Jim Stoltz "Spirit Is Still On The Run"

Walkin' Jim's deep voice and wilderness-inspired lyrics will send shivers up your spine and launch a howl in your heart. Includes: All Along the Great Divide; Lone Lion Runs; Followin' the Rainbow Trail; Yellowstone Tales; Sweetwater; and more. \$11 postpaid.

Walkin' Jim Stoltz "Forever Wild"

Walkin' Jim Stoltz has walked 15,000 miles across the wilds of the West. These songs were written in the wilderness and are sung with his incredibly deep and resonant voice. Jim's second album includes: The Brand New Grand Canyon Suite, The River Song, Just A Part of the Sky, Let Me Listen To The Wind, Wolf Song, Old Cisco, Follow Your Heart, I Walk With The Old Ones, Green and Growing, Forever Wild. Includes liner notes. \$11 postpaid.



Colorado River Songs Katie Lee

EARTH FIRST!

TRINKETS & SNAKE OIL

OVERGRAZING SLIDE SHOW

A new slide show, "The Eating of the West", graphically displays the devastation of Western public lands at the hands (and hooves) of the livestock industry. The show consists of over 100 high-quality slides from National Forests, National Wildlife Refuges, and BLM lands which portray the shocking magnitude of the problems caused by grazing. The slide show comes with a written script and is rented at cost, \$10. Free copies of a 48-page tabloid on grazing are also available. Please include with your order the name and phone number of a contact person, and the date you need the show along with alternate dates. Orders must include street address for UPS delivery. "The Eating of the West" was funded by donations to Lynn Jacobs and the Earth First! Foundation.



WINDOW STICKERS

NO COWS Cow and barbed wire in black with "universal no" red slash and circle. Words: Free Our Public Lands! Stop Destructive Welfare Ranching End Public Lands Livestock Grazing. 3 inch diameter white vinyl circle. 6 for \$1 postpaid.

EARTH FIRST! FIST Green EF! fist with the words "EARTH FIRST! No compromise in Defense of Mother Earth" in green on a 3 inch diameter white vinyl circle. 4 for \$1 postpaid.



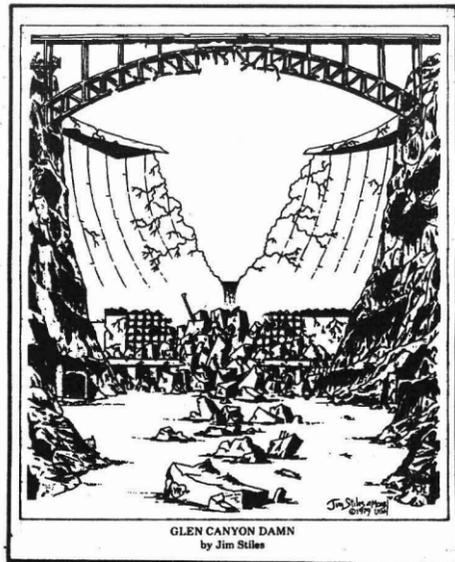
CAMO CAPS

We've got a variety of camouflage baseball caps. They come in either woodland or desert camo, 100% cotton or mesh backs. They all have adjustable tabs so one size fits all. The EF! fist logo and the words "EARTH FIRST!" are printed in black. Be sure to specify what style you want or we'll send you what we have most of. \$8 postpaid.



NON-CAMO CAPS

For you non-militaristic types out there, we now have a non-camouflage cap - the fist and "Earth First!" in black ink on a tan cotton cap with either cloth or mesh back. One size fits all. \$8 postpaid



CRACKING OF GLEN CANYON DAM MOVIE

The excellent 10 minute, color-sound 16mm movie of Earth First! cracking Glen Canyon Dam in 1981 starring Ed Abbey and Johnny Sagebrush. An inspiring and humorous introduction to the Earth First! movement. Rental fee of \$30 for showing to groups (includes shipping fee); \$5 (shipping only) for EF! groups. Note: rental only; not for sale. Orders must include street address for UPS delivery.

EARTH FIRST! EMBROIDERED PATCHES

This embroidered patch features the green fist and the words "EARTH FIRST!" and "No Compromise." Green and black on a white 3" diameter round patch. \$3.50 postpaid.

HAYDUKE LIVES EMBROIDERED PATCHES

These are black 3 inch diameter round embroidered patches with a red monkey-wrench and the words HAYDUKE LIVES in red. \$3.50 postpaid.

SILENT AGITATORS

Fun to stick anywhere - bar bathrooms, Freddie offices, trail registers... wherever the evil ones need to know that we are about and watching.

EARTH FIRST! FISTS

Green EF! fist logo with words "EARTH FIRST! No compromise in defense of Mother Earth" in red ink. 1 5/8 inch diameter circles. 30 for \$1.25 postpaid.

ANTI-GRAZING

A grazing cow and barbed wire with the universal "no" slash, and the words "Free Our Public Lands!" and "Stop Destructive Welfare Ranching End Public Lands Livestock Grazing." 1 5/8 inch diameter circles. 30 for \$1.25 postpaid.

COORS

Spread the word on these villains. Black words on green stickers. 2 x 3 inch rectangles. 10 for \$1.25 postpaid. Coors is Anti-Earth
Coors is Anti-Women
Coors is Anti-Labor
AND IT TASTES AWFUL!
BOYCOTT COORS

"TOOLS"

The late John Zaelit's Monkeywrench and Warclub design is back by popular demand. Brown design with "Earth First!" in green on 1 5/8 inch diameter white circles. 30 for \$1.25 postpaid.

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- Here's \$400 or more for a life subscription to *Earth First!*.
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- I'm broke. Please send me a subscription for \$
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The EF! subscription list is kept entirely confidential. You are welcome to use an alias. Make sure the mailperson knows that James What (or whoever) is getting mail at your address.

EARTH FIRST! TRINKETS

BUMPERSTICKERS

Unless otherwise indicated, our bumperstickers are green lettering on long lasting white vinyl and are \$1 postpaid. *Starred bumperstickers are multi-colored with designs and are \$1.25 postpaid.

AMERICAN WILDERNESS *
LOVE IT OR LEAVE IT ALONE
(with red, white & blue US flag)

ANOTHER MORMON ON DRUGS

BACK TO THE PLEISTOCENE
(With "Ned Ludd" logo)

BOYCOTT COORS "BEER"

DAMN THE CORPS NOT RIVERS

DARWIN
(letters in evolving fish with legs)

DESERT RAPER
(bright red lettering - a sticker with many uses)

DEVELOPERS GO BUILD IN HELL!
(black and red lettering, 12 for \$5)

DREAM BACK THE BISON
SING BACK THE SWAN

EARTH FIRST!

ESCHEW SURPLUSAGE

HAYDUKE LIVES

HUNT COWS - NOT BEARS

HUNTERS:
Did a cow get your elk?

I'D RATHER BE MONKEYWRENCHING
(with Monkeywrench/War Club logo)

IF YOUR PECKER WAS AS SMALL AS MINE,
YOU'D NEED A MUSCLE WAGON, TOO!
(Important note: This bumpersticker is - hopefully! - not for your own vehicle, but to surreptitiously paste on a jacked-up muscle wagon you find in the local shopping center parking lot. Don't get caught! These stickers are constructed out of cheap paper with permanent adhesive to maximize the difficulty of removing them. Special price: 12 for \$5!)

MALTHUS WAS RIGHT

MUIR POWER TO YOU*
(white and black on brown with face of Muir)

NATIVE*
(blue words with blue, green & white globe)

NATURE BATS LAST

NEANDERTHAL AND PROUD
(With "Ned Ludd" logo)

NO SCOPES!
SAVE MT. GRAHAM
(with no scopes logo)

OIL AND BEARS DON'T MIX
(with bear logo)

PAY YOUR RENT
WORK FOR THE EARTH

PROTECT OUR ENVIRONMENT
STOP PUBLIC LANDS LIVESTOCK GRAZING

REDNECKS FOR WILDERNESS

RESCUE THE RAINFOREST

RESIST MUCH, OBEY LITTLE

SAVE THE YELLOWSTONE GRIZZLY
(red & brown with bear & no ski area design)

SAVE THE WILD

STOP THE FOREST SERVICE
SAVE OUR WILD COUNTRY

STOP CLEARCUTTING

SUBVERT THE DOMINANT PARADIGM

THINK GLOBALLY - ACT LOCALLY

VOTE GREEN

WOLVES! - NOT COWS

Almost FREE BUMPERSTICKERS!

The following bumperstickers are printed on cheap paper (very difficult to remove) and look great on certain signs throughout the West. We have a large quantity available, and will happily send you some if you'll cover the postage. Send a 25 cent SASE for two stickers, 45 cent SASE for six, or write to inquire about larger volumes.

GET LIVESTOCK OFF
OUR PUBLIC LANDS

PUBLIC LANDS GRAZING =
WELFARE RANCHING

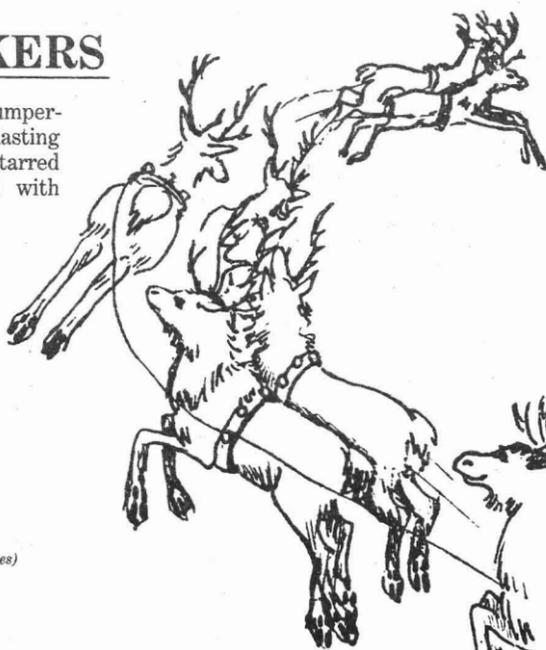
LIVESTOCK GRAZING INDUSTRY
= PUBLIC LANDS RIPOFF

STOP WELFARE RANCHING

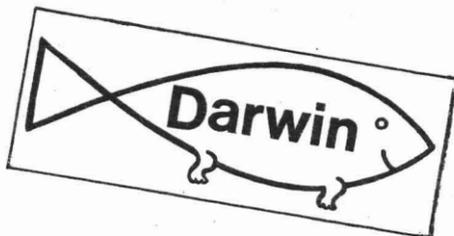
NEW BUMPERSTICKERS!

DEVELOPERS GO BUILD IN HELL!

DESERT RAPER



AMERICAN WILDERNESS
LOVE IT OR
LEAVE IT ALONE



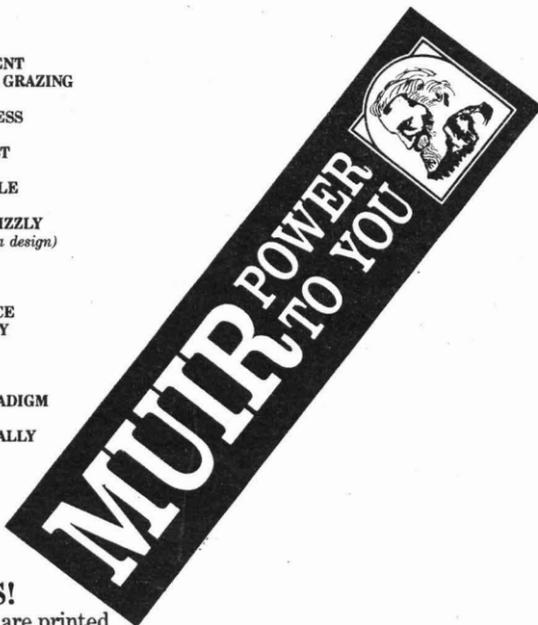
NEANDERTHAL
AND PROUD



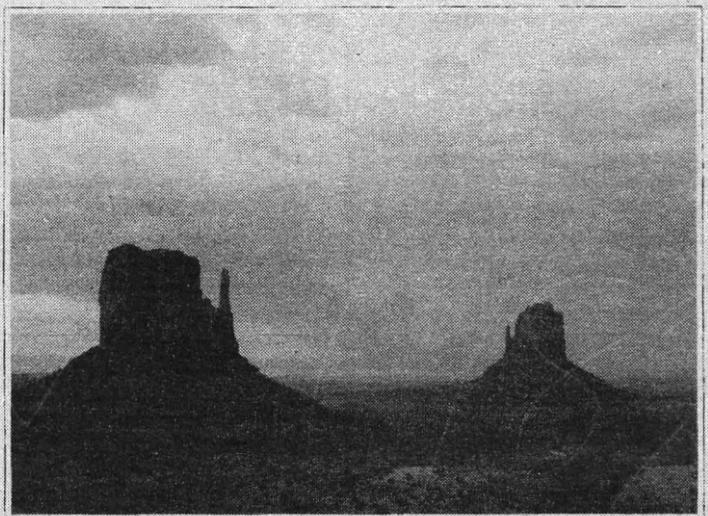
I'd Rather Be
Monkeywrenching
EARTH FIRST!



NATIVE



1989 CALENDARS FROM DREAM GARDEN PRESS



THE 1989 WESTERN WILDERNESS CALENDAR

The wilderness calendars from Dream Garden Press are rightfully considered to be the finest nature calendars produced in the world today; moreover, Dream Garden is owned and operated by Spurs Jackson, a long-time supporter of Earth First!. Buy your 1989 calendars (for yourself and for gifts) from Earth First! so the beauty portrayed on your wall can be defended with the money from your purchase.

1989 CALENDARS:

Big Bend National Park
California Wilderness
Grand Canyon National Park
Great Smoky Mtns. National Park
Shenandoah National Park
Utah Wilderness
Western Wilderness
Yellowstone
Yosemite

All calendars are \$10.50 postpaid, except Yellowstone which is \$11.50 postpaid.



OIL AND BEARS
DON'T MIX

Bristlecone Pine



by Claus Sievert

POB 2358
Lewiston, ME 04241

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1 Nov 1988

ON BECOMING HOMO LUDENS
Christoph Mares p 27.

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is Expired. Please Renew!

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