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# Wild Earth

VOLUME 1, NUMBER 2

**Issue Theme:**

*The New Conservation  
Movement*

**Articles and Essays by:**

*Rick Klein*

*Jim Eaton*

*Cindy Hill*

*Dave Foreman*

*... and others*



BRUSH WOLF ©

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Cover: The Wolverine (*Gulo gulo*) formerly ranged throughout the arctic, subarctic, and taiga regions of North America and Eurasia. This heaviest and most powerful member of the weasel family (Mustelidae) in North America has been extirpated from most of its original habitat south of Canada, but if the goals of the groups featured in this issue are realized, it will again prowl the Northern Transition Forests, the Rocky Mountains, the Coast Ranges, and the Sierra Nevada. The artist, Brush Wolf, lives near former—and possibly present—Wolverine habitat in Colorado.

# Wilderness: From Aesthetics to Biodiversity

by Jim Eaton

In the late 1970s I met with a planner from the Bureau of Land Management (BLM) to discuss the agency's inventory of potential wilderness areas in the California desert.

Although a bureaucrat, he was quite sympathetic to wilderness preservation and extolled the virtues of the Turtle and Whipple mountains, Saline Valley and the Eureka Dunes, Owens Peak, and the Kingston Range. His favorite part of the desert was the East Mojave with its towering sand dunes, cactus gardens, relict conifer forests, and mountains of granite, limestone, and basalt. But I was drawn further west to a huge roadless tract on his map. "What about the Bristol Mountains?" I asked.

"Oh no," the BLM planner replied, "they're too bleak for wilderness."

I had mistakenly assumed that when we began discussing desert wild lands we had left the "scenic" concept of wilderness behind. I was wrong. This planner had done an admirable job of inventorying the roadless areas in the desert, yet his recommendations were based on recreational and aesthetic values.

Yet I understood his bias. Many of us who became wilderness activists in the '60s were backpackers who wanted to protect our favorite tramping grounds. In California, this usually meant defending the rock and ice of the Sierra Nevada from off-road vehicles and highway engineers. But as we explored lower elevation areas, learned about the flora and fauna, and shared our knowledge with other activists, we began the conversion from anthropocentric hikers to biocentric environmentalists.

Not everyone made this transition. When I worked for a local chapter of the Sierra Club from 1972-74, I was frustrated frequently by Club leaders who apparently believed the rantings of wilderness opponents who harangued them for locking up the public lands for their own exclusive use. These conservationists felt guilty for asking for the preservation of wild lands; they avoided controversy at all costs. When developing a wilderness proposal, they conceded all commercial forests to the timber industry, all valuable minerals to the miners, all potential ski areas to the downhill skiers, and all trails used by machinery to the off-road vehicle enthusiasts. They gave away critical wild lands, and got nothing in return. By the time their proposal made it to Congress where the real trade-offs begin, there was nothing left to compromise.

This was the impetus for joining with friends to organize the California Wilderness Coalition in 1976. Our horizons were being expanded by hundreds of newly identified wild areas in the two roadless area reviews and evaluations (RARE I and RARE II) and the requirement that the BLM study all its lands for potential wilderness areas. Many of these de facto wilderness areas contained ecosystems not represented in the National Wilderness Preservation System. We were reminded of Pogo's apt line, "we are faced with an insurmountable opportunity."

However, national groups were growing increasingly timid about defending these "new" wild lands. Fierce debates ensued regarding how much wilderness environmentalists should endorse. In RARE II, many of us felt the only acceptable choice was Alternative J, the all wilderness option. We wore T-shirts sporting a tree ringed by a chain and padlock labeled "Citizens for Lockup J." We were accused by some of our associates of being "unreasonable" and "irrational."

Ultimately Congress attempted to resolve the issue. When legislation for California finally passed in 1984, only 1.8 million of the 6.3 million acres of roadless land were protected as Wilderness. Many activists refused to be daunted by this compromise; they vowed to continue to work for protection of the discarded wild areas. They got involved in the National Forest planning process.

Then a funny thing happened. Environmentalists started looking *outside* the roadless areas to the adjacent public lands. To be sure, there were earlier visionaries like Aldo Leopold and Gordon Robinson who voiced a land ethic and promoted excellent forestry, but

*continued next page*

## Arizona 5 Trial Begins

Opening arguments in the trial of the Arizona Five were presented Wednesday, June 20, in the Prescott, Arizona courthouse. The five are Ilse Asplund, Mark Baker, Mark Davis, Dave Foreman, and Peg Millett.

All of the defendants face six counts, the first of which is conspiracy. An additional count, that of causing damage at the Snow Bowl ski area near Flagstaff, has been leveled

against Asplund, Davis, and Millett. Each defendant has his or her own lawyer.

In the courtroom Wednesday the government presented its argument first, equating monkeywrenching with terrorism, which it accused Foreman of instigating and bankrolling. Then the defense lawyers spoke in turn, each pointing out what evidence would show to exonerate his client. The common theme among the defense attorneys was that the only crimes perpetrated, the only conspiracy concocted, was by the FBI. The reasons: Dave Foreman wrote a book the government did not like; Dave spoke out in

defense of the earth and the government wants him silenced. To that end the government used paid informants and undercover agents trained in deception and lies to manipulate and exploit the lives of several people.

The trial, which had originally been scheduled for Phoenix, is expected to last four months. "At least, it's cooler in Prescott than in Phoenix, 80 degrees instead of 110," an attorney assisting in the defense sighed. The event is the talk of Prescott. The driver of the tour bus that rumbles around town points proudly to the courthouse, site of the "world-famous Earth First! trial."

the movement really didn't take off until the era of Earth First! and Deep Ecology. Many activists began realizing they were saving wilderness islands that, in the long run, would not sustain the species they thought they were preserving. It was critical to protect these isolated wild tracts, but this was not enough. Yes, there are Spotted Owls and Wolverines in designated Wilderness Areas, but without corridors to connect the disjunct populations, these animals are doomed to extinction.

Today the New Conservation Movement, as Dave Foreman calls it, has brought environmental issues to the front page of the major daily newspapers. The New Conservationists are filing petitions and lawsuits to protect the Fisher, Marbled Murrelet, and Spotted Owl. They are mapping our remaining ancient forests, not just in the Pacific Northwest, but everywhere they exist.

Although there are some national organizations leading the way, most of the New Conservationists are activists in grassroots groups. While the national groups use "biodiversity" and "ancient forests" in their fund appeals, the real work is being done in small offices in Eugene, Ashland, Arcata, Ukiah, and Kernville. The visionaries are not the nationals but the state and local groups like the Oregon Natural Resources Council, Alliance for the Wild Rockies, and the Ancient Forest Defense Fund.

These women and men *understand* biological diversity and what needs to be done to keep remnant, but viable, ecosystems intact. They use the Endangered Species Act and National Forest Management Act yet know that these antiquated laws do not address the preservation of diverse ecosystems. So they are mapping out legislation to achieve such protection.

I hope the mainstream national organizations will follow, not hinder, these visionaries. If they will not join the New Conservationists, they should get out of the way.

We have nearly achieved a national wilderness system that protects many of the nation's scenic wild areas. We have just begun the job of preserving the ecosystems of which these wilderness islands are but a small part.

*Jim Eaton, formerly a regional representative for The Wilderness Society, has for many years helped lead the effort to save California wildlands as Executive Director of the California Wilderness Coalition. (CWC publishes an excellent monthly, Wilderness Record, available with membership for \$15 a year: 2655 Portage Bay East, Suite 5, Davis, CA 95616.)*

## EDITOR'S RAMBLINGS

The theme of this issue, "The New Conservation Movement," reflects the conviction of Dave Foreman and a growing number of wilderness proponents that the conservation movement is being reshaped and renewed by the many grassroots conservation groups that have sprouted up in recent years. The groups featured in this issue are among the most effective biodiversity advocacy groups on this continent. To broaden our representation, I'll suggest here some heretofore seldom-tapped resources for enlarging the ranks of conservationists.

Academics represent a vast pool of latent energy (surely more than lies beneath the Arctic National Wildlife Refuge). Professors and their students are educated and concerned, yet often uninvolved in issues off campus. Embroil them in your struggles. Encourage them to make their studies relevant to real world problems. For example, chemistry students should not be ensconced in labs; they should be measuring the pH of rain, the pollutant levels in local streams, the toxicity levels in wild animals that die of mysterious causes. Biology students should be studying how to restore native vegetative communities, reintroduce extirpated predators, stop the spread of exotics ... and so on.

Naturalist societies are another great underused resource. Most states and provinces have scores of naturalist groups of various sorts which may not yet take active roles in defending that which they observe. These include herpetological, ornithological, geologi-

cal, and native plant societies. Join such societies and tell their members about threats to the wildlife they study. (In the United States, the society with the largest constituency may be the Xerces Society [10 SW Ash St, Portland, OR 97204]. According to Xerces, "invertebrates account for 90% of the animal biomass of our planet and 95% of all animal species." This fine group is active in conservation.)

Naturalist groups can be located by visiting a library or talking to local birders and science professors. Another good way to find such groups is to join local Sierra Club and Audubon chapters, whose members are apt to include a few who also belong to naturalist societies.

This brings us to another underused energy source: local and regional chapters and groups of the Sierra Club and National Audubon Society. These tend to be more quiescent than befits conservation groups, now that the global species extinction rate has topped 100 per day. Join these groups, accept positions of responsibility (e.g., conservation or wildlife chair), and prod them into taking tough stands on the issues (e.g., advocating termination of all commercial exploitation on all public lands).

Senior citizens are another group to approach. Many old folk these days see the folly of American ways, and have much time with little to do. Ask these wise elders to write letters to elected officials, local newspapers, and their alumni magazines. Give talks and conservation magazine subscriptions to nursing homes and retirement communities.

Give them also to local and regional offices of land management agencies: US Forest Service, BLM, National Park Service, Fish & Wildlife Service; state fish & game departments, and such. Most of the bureaucrats directing these agencies are ecologically ignorant and morally deficient. Many of the employees on the ground, however—Forest Service rangers, Park rangers, and the like—are deeply concerned about protecting natural areas. They are often glad to provide conservationists with information, though they must be discrete if they wish to keep their jobs. The Association of Forest Service Employees for Environmental Ethics is having tremendous success in encouraging these people to speak up (see AFSEEE article this issue).

Children are an obvious source to tap. Children love animals, and will eagerly plant trees (natives only, please!), clean up litter, raise money to save forests, and undertake other good deeds if motivated by good Nature presentations. To this end, it is well worth conservationists' time to communicate with environmental educators. These teachers are generally well aware of the global crises—deforestation, ozone depletion, and such—but may not know of timber sales or grazing permit renewals planned in their own regions. They, in turn, could encourage their students to participate in public hearings and comment periods mandated by such statutes as the National Environmental Policy Act.

These are merely a few of the trails we should tread in our efforts to gain more defenders of wilderness. *Wild Earth*, with this and future issues, will spread the news about paths that prove fruitful to the groups comprising the New Conservation Movement.

—John Davis

# HOUSE-KEEPING

We have been surprised and encouraged at the number of readers who have included donations with their subscription orders or who have sent gifts to the Wilderness Covenant Foundation.\* We thank all of you. Your gifts are helping to make the magazine viable.

We also thank donors of gift subscriptions. In this respect we owe a special debt to a California benefactor who enriched our mailing list with more than eighty thoughtfully selected names. Gift subscriptions are a present to us as well as to the recipients.

To encourage those of you who have not already given subscriptions to think of *Wild Earth* when a present is in order, we are reducing, to \$15 each, the price of second and additional subscriptions. Your own subscription counts as the first, as long as it has not expired. This offer is good until September 30. Incidentally, back issues are now available.

Whether or not you can afford to give subscriptions, you can help our writers to reach the audience they deserve by convincing nearby libraries to subscribe. (Virtually all of *Earth First! Journal's* subscriptions went to *Earth First!* rather than to *Wild Earth* because of the default provision in the transfer procedure.) At the library, ask to see the librarian in charge of selecting periodicals, and show the selector your copy. If the librarian wants to keep it, you may offer to have us send a sample. We will mail a copy free of charge to any library. Be sure to tell us the name of the selector.

Professors, as is well known, have clout in the selection of periodicals at their institutions. Less well known is that students may have even more clout. I worked at a university library so terrified of student opinion that it automatically ordered any book or periodical suggested by an undergraduate, even if only on a note dropped into their suggestion box.

We hope to start a "Nature Bats Last" column in the magazine. We therefore welcome news briefs on this theme.

We have received several fine entries in our logo contest, which is still open.

'Tis the Summer Solstice and a cool, sunny evening in Canton. Happy second half of the year to all our readers.

—Mary Byrd Davis

\* Wilderness Covenant, POB 5217, Tucson, AZ 85703, accepts donations to *Wild Earth* that the giver wants to deduct from taxes.

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## STATEMENT OF PURPOSE

*Wild Earth* is a non-profit periodical serving the biocentric grassroots elements within the conservation movement, and advocating the restoration and protection of all natural elements of biodiversity. Our effort to strengthen the conservation movement involves the following:

- We shall provide a voice for the many effective but little-known regional and ad hoc wilderness groups and coalitions in North America.
- We shall serve as a networking tool for grassroots wilderness activists.
- We shall help develop and publish wilderness proposals from throughout the continent.
- We shall aim to complete, and subsequently publish in book form, a comprehensive proposal for a North American Wilderness Recovery Strategy.
- We shall render accessible the teachings of conservation biology, that activists may employ them in defense of biodiversity.
- We shall expose threats to habitat and wildlife, and offer activists means of combatting the threats.
- We shall facilitate discussion on ways to end and reverse the human population explosion.
- We will defend wilderness both as *concept* and as *place*.

# LETTERS TO THE EDITORS

Wild Earth invites letters from readers. We can neither print nor respond to all of them, and those printed may be edited down for space, but we will strive to print a representative cross-section. Expressed opinions, no matter how heterodox, do not necessarily reflect those of the editors or any other contributors to these pages.

## 100 MILLION GOLBLAMED COWS

The livestock industry often laments that they are not interested in making money; what they really want to preserve is their lifestyle. But, one can ask, just what does preservation of this lifestyle entail and what does it cost in terms of landscape integrity? There are, no doubt, some attractions to having one's own mini-kingdom. There's a powerful attraction to an occupation that involves outdoor work and somehow epitomizes the agrarian ideal of the yeoman farmer. However, there is a darker side to this lifestyle.

The way of life practiced by the western livestock industry could just as easily be called a "deathstyle." Not for the ranchers, no, they live a life better than most Americans. Occasional hard work, yes, but one can hardly suggest that someone who owns hundreds, if not thousands of acres of land, is poverty stricken or destitute. But to support those people requires sacrificing a good part of our natural heritage. And there are numerous tombstones, if you will, to the livestock industry throughout the West.

We see monuments to this destructive industry in the dry, dusty river channels dewatered to provide irrigation water to feed cows. And there are the barren hillsides, denuded of their cloak of grass, eroding tons of precious topsoil to the sea. There are the trashed out riparian zones and the polluted waterways which stand in mute testimony to the abuse wrought by cows. And there are dozens of species close to extinction—Desert Tortoise, Masked Quail, Mexican Wolf, Colorado Squawfish, Whitehorse Cutthroat Trout, Black-footed Ferret, Swift Fox, Grizzly Bear, and Columbia Sharptail Grouse—all victims in one way or another of this "deathstyle." If fully counted, the litany of species devastated by livestock would number in the hundreds.

Ranchers are not evil people, and individually their impacts may seem acceptable, but their cumulative influence upon the ecological integrity of the arid West can only be called devastating. More than 400 million acres of public and private rangelands in the West are considered to be in unsatisfactory condition—meaning they are ecologically trashed. This is nearly 1/4 of the total land area of the US excluding Alaska. Given the tiny amount of meat produced and relatively few people employed, one can legitimately ask if the rest of us should continue to tolerate the practices of such an abusive industry.

—George Wuerthner, Box 273,  
Livingston, MT 59047

All across the West, our wildlife is disappearing, replaced by livestock. What little water there is is impounded for cattle and sheep. The ranchers seem to believe that public water exists only for their livestock.

Nationwide, 69% of U.S. Forest Service land is open to grazing. 89% of Bureau of Land Management lands are used for grazing. 270 million acres of land held in trust for all Americans have been given over to the 23,000 welfare ranchers who exploit an outdated system; public-lands ranchers receive an average of \$66,000 each of our tax dollars in subsidies annually, yet these welfare ranchers produce less than 2% of the nation's beef supply.

Cows are not native to North America. They are especially poorly adapted to the semi-arid climate of the American West. The grazing of imported cows has degraded rangelands, destroyed riparian habitat, caused the loss of topsoil, and defrauded the taxpayer.

Native predators have been exterminated; natural competitors like Bighorn Sheep and Pronghorn Antelope are hanging on by a thread. The livestock fences erected all over our public lands strangle or starve native wildlife, and the campaigns of "Animal

Damage Control" leave poisoned and maimed carcasses littered across the West.

Most of these ranching subsidies were originally designed to encourage white Americans to settle the lands west of the Mississippi. In the 1800s, such "Western Expansion" was seen as necessary to fulfill the Great American Dream. Quite apart from the merits of that dream, the West is settled now. If there was ever any justification for this territorial imperative, it certainly does not exist anymore.

But these peculiar subsidies continue, perhaps so that we can perpetuate the myth of the "western lifestyle," the male love-affair with the cowboy (which was largely invented by Hollywood). The "romance of the West" is frequently cited as a justification for continuing the federal subsidies. Apparently many of these men see themselves in some kind of John Wayne or Gary Cooper role—they find this image very attractive. But what they're doing to our land is not attractive at all.

In Yellowstone National Park, the ESA-mandated wolf recovery plan has met with such resistance from ranchers that it looks as if wolves will only be restored if we agree to remove them from "Endangered Species" status, and permit these cowboy-ranchers to shoot them if they venture outside the Park. Recently the Montana Cattlegrowers Association was quoted as saying that the question of wolf reintroduction has increased their membership dramatically.

Similarly, in Arizona and New Mexico, the critically endangered Mexican Wolf (now extinct in the wild north of Mexico) will not be reintroduced to its natural habitat unless a special exemption is made calling them a "non-essential, experimental" population. (This would permit local ranchers to shoot them.) The welfare ranchers have no shame: they take \$1 billion of our tax dollars annually, use the public lands for next to nothing, and still expect those lands to be delivered to them free of



Western Meadowlark by Chris Billis

inconvenient wildlife. They'll kill any wolf on sight, lest it take even one of the more than 100 million unnecessary cattle raised every year.

And at Yellowstone National Park, the American Bison are also treated as a threat to livestock. Apparently some of the Bison might carry Brucellosis, a disease which could in theory be transmitted to cattle, and might cause some of the cows to abort their calves. This has never been documented; no cow has ever been lost to Bison-transmitted Brucellosis in the wild. But because it could theoretically happen, any Buffalo which steps outside the Park has been summarily shot.

Now, while some Buffalo do carry Brucellosis, so do many Elk, Coyotes, deer, and prairie dogs. Should these animals be exterminated as well, to protect the welfare ranchers' cows?

I suggest we stop this self-indulgent glut now. The West has been conquered. Manifest Destiny is over. (Or it should be.) We don't need to subsidize any more aging, adolescent cowboys. It's time for them to grow up and get a useful job.

What we need to do to help these guys is to stop eating welfare beef. "Public Lands Welfare" is (at the least) un-American. (Even under Communism, one is only guaranteed a job, not a "romantic" job.) Quite apart from cruelty or cholesterol, we don't need to fund any more tired cowboy fantasies at the expense of wildlife.

I suggest that anyone who cares about wildlife should stop eating beef now. Not only should we stop buying beef, but we should each send a letter to the American Beef Council and the American Cattlegrowers' Association explaining that we cannot buy their product until they leave the wolves, bison, and bears alone, and until they get their cows off the public lands. Our letters should make it clear that this is a retaliatory response to their efforts to destroy American wildlife. We should also tell them that we will not eat beef again until all native wildlife has been restored to its original range and numbers throughout America, and that we hold them directly responsible for the loss of this wildlife.

Yes, such a boycott will penalize the private-lands ranchers as well as the welfare ranchers. That is a great pity, but it is up to the massively-subsidized American Beef Industry to clean its own house. Let the industry as a whole police its members. Let the American Beef Council decide whether welfare ranching is really worth the cost. And let us decide if we want to keep paying for those cheap hamburgers with mountain lions, buffalo, wolves and bears.

—Margaret Hays Young, Wildlife & Wilderness Chair, NY Sierra Club

## BIOPHILIA ARISING

I enjoyed Dolores LaChapelle's article *Wild Human Wild Earth* but as I read it I find her doing exactly what she warns against—using the rational hemisphere of the brain to take things apart to see how they work. Do we really need to break down our emotional attachment to nature to explain why and where it arose in our ancestors? Do we really have "an affinity for shade, trees ... the forest interior?" In the June issue of *American Forests*, Charles Little contends that we fear the forest because of our ancestral past. He writes "We are of the savanna ... (so feel) ambivalent about the jungle ... Every species has a right habitat and the savanna is ours ... not the deep forest."

So this type of logical thought can be used to explain why we love or why we hate the environment. Which is correct?

It really does not matter because what we know to be true is this—human beings are capable of recognizing and responding to a universal principle from which all creative force, in its endless variety and form, is set in motion. Within this principle exist the valued human emotions of altruism and empathy that LaChapelle refers to as well as constancy of intelligence, strength, purpose, vibrancy of vision, driving force and enthusiasm.

We do not know why we are capable of recognizing and responding to this principle and loving the earth, but we are. Dreams, rituals, dancing, drumming may all be useful in getting individuals to respond to this principle. But in our work at the Land Ethic Institute we have found that they are not necessary. Not many CEOs will drum around a campfire, but we have found that when presented with a pure rendition of the universal principle in another way they are impelled to offer responses that otherwise would have remained inactive or dormant.

—Robert T. Perschel, President,  
Land Ethic Institute,  
16 Germain St,  
Worcester, MA 01602

## NICHE NETWORK NEEDED

Not many private lands are left alone for the whims of Mother Nature. In fact, many private lands are a thorn in the wild areas of surrounding public lands. If these private lands were managed in harmony with the adjacent preserves, a larger and more diverse ecosystem would be allowed to flourish. The more contiguous habitat allowed to exist, the greater the diversity per unit area, according to Island Biogeography.

Our public lands are riddled with private inholdings that date back to the Homestead

Act. With the 1872 Mining Law citizens can buy public lands and create a swiss cheese effect within National Forests or BLM lands. The verdant valleys of many National Forests are privately owned. Natural corridors between different National Forests, Parks or other public lands are virtually non-existent. Consequently, the integrity of the larger ecosystem is at risk. The productivity of riparian regions and winter ranges must yield to the interest of cattle and commerce. Grizzly habitat and limnetic communities are inadvertently destroyed by a few men in search of a yellow rock or mature timber.

But all is not lost. If you establish a private preserve, loggers, miners and farmers can't touch it. If you plan your purchase strategically, you can even make it hard for them to go log or mine a nearby National Forest. Moreover, if the land is held in trust by several hundred nature lovers, it becomes hard for others to sue over the legalities of right-of-way closures.

We need a Nature Conservancy of sorts that won't compromise away our private preserves. Wilderness should be established on all lands purchased—no motorized vehicles allowed, roads will be ripped and revegetated, buildings will be torn down or disabled, hunting and flower picking verboten. Unfortunately, to my knowledge, no group has taken such an extreme stand. The Nature Conservancy often sells or swaps lands with the federal government, only to leave many of the rules up to the whims of the masses. Sure you've got a bigger National Wildlife Refuge, but it may still allow more roads and drilling for oil and gas. Moreover, that old farmhouse always seems to end up as a laboratory or nature center. Man needs to learn to let some structures die. It's time for negative material growth.

This is not to belittle the efforts of The Nature Conservancy. They play a vital role in species preservation, but the time may be right to manage lands in a "hands off" fashion. To that end I propose the establishment of a land purchasing organization, Niche Network.

If you're familiar with fund-raising, legalities, land acquisitions, or just plain want to help, please contact me. Niche Network exists only as an idea, but with your help it can become a reality. I'm in the process of incorporating Niche Network as a non-profit organization and am looking for people to serve on a board of directors and as officers.

—Brandon Lloyd, POB 123,  
Wilson, WY 83014



# The New Conservation Movement

by Dave Foreman

Events oftentimes unfurl down different lines from those their authors plan. In 1981, when James Gaius Watt saddled up as Ronald Reagan's prissy paladin to head the conservationists off at the pass, neither the Secretary of the Interior nor Reagan's handlers (*nor* environmental groups for that matter) could have predicted the outcome from Watt's pot shots at "environmental extremists."

The public, in reaction to the bewitchingly creepy Secretary of the Interior, joined groups like The Wilderness Society, Sierra Club, National Audubon Society, and National Wildlife Federation in droves. As memberships soared to unprecedented heights, cash flow too welled up, allowing the organizations to hire more staff, trot out more programs, and cover more ground.

My first wife's father—a crusty old fart who provided ranchers with government loans—once scoffed at me that environmeddlers were against all growth except their own. Being a slow, dense fellow (that's why my father-in-law liked me—I was easy prey), it took me some years before I appreciated his gibe. Not until the early '80s did I fathom that even for do-gooders fat carries much cholesterol. The new Watt members of the Sierra Club were "soft"; that is, they were less committed than the old members, often having joined on impulse after some particularly droll Wattism, and when their membership renewal came due a year later they were likely to drop.<sup>1</sup> The Sierra Club administration, though, had immediately grown to count on the dues from the swollen membership, and, indeed, had expanded the Club's infrastructure to reflect (and require) that new level of funding. A treadmill was thus created, a treadmill in pursuit of members and their dues. Because the rate of renewals declined, more direct mail pleadings for new members had to be sent out just to stay even, much less forge ahead—as any entity must do when it comes to depend on planned growth. Of course, other environmental organizations (as well as other pro-

gressive social change groups) were taking advantage of the Reaganauts by climbing on the same growth/direct mail treadmill.<sup>2</sup> To compete against allies in the membership run, each group had to redouble its efforts. More money was needed to raise more money. The proportion of each group's budget devoted to fundraising and membership solicitation increased faster than did contributions and members. The treadmills twirled faster and faster and no one had the *huevos* to jump off.

With more and more soft members, the percentage of active members decreased. This sociological imbalance led to power being concentrated in few hands and the grassroots being ignored in the high councils—soft members sent their money to national headquarters, strengthening the officers, without contributing to local efforts. A new breed of professional manager had to be hired to manage multi-million dollar budgets and corporation-sized staffs. As there were essentially no people in the conservation movement with such managerial experience, new executive directors and chiefs of administration came instead from government and business. Heightened estrangement between staff and volunteers resulted. It was a replay of the John Muir-Gifford Pinchot split that historian Stephen Fox says characterizes the conservation movement—an eternal tug-of-war between the passionate amateurs (Muir) and the professional resource managers (Pinchot).

Furthermore, a conservation group hooked on growth, with a CEO from government or industry, does not want to turn up the heat. Rash or controversial actions could lose soft members, and the foundation and corporate grants that the groups increasingly depended upon to fund top-heavy staff and high-profile programs. So, even with greatly increased revenues and memberships, these currents pushed conservation groups to take milder positions and to show greater reluctance in challenging the political and economic establishment. Indeed, they were becoming part of the establishment, albeit cast as a loyal opposition.

So, by the time Watt left government employment, prominent conservation groups had grown immensely. But they had become

even more cautious than previously and the gulf between membership and staff/leadership had widened.

This may make you sit back, pop another top, and ponder the card shark sleight of hand of the Heritage Foundation. Did Jim Watt pull a fast one? Did the tall bald man squeeze off a carefully aimed shot that wounded the environmental extremists? Did Watt figure his "Godzilla eats Bambi" style would have this result? On a hot summer night in Tucson, with cold Pacifico, good cigars, and amiable rascals for company, it's fun to contemplate such a chess master strategy bubbling inside Watt's skull box, like one of those automatic popcorn poppers. But, alas, not even Ron Arnold, Watt's cocker spaniel of a biographer, claims such cleverness for his hero; so says one of the rascals, a university man who has studied such fawnings. Well, then, was it a lucky shot that ol' mole-eye made? A fortunate hip-shot into the night that winged the Muir Gang?

Things really don't turn out the way they are planned. The ultimate result of fattening the conservation movement with Brie and Chablis was to cause a New Conservation Movement to push up from the old roots, like green shoots of bunchgrass following a wet spring. The Wyoming cowboy, unlike the eponymous cow, did not nibble down those shoots. Inadvertently, he fertilized *them* instead of the conservation blue bloods, as is commonly believed.

It is this New Conservation Movement that is the focus of this issue of *Wild Earth*. The real story of conservation in the 1980s is not the growth of the mainstream national groups or the high media profile of the Earth First! phenomenon, but the quietly implacable swelling of a new conservation movement—the conservation movement of the 1990s.<sup>3</sup>

My views are shaped by my own experience of the '70s—going from the original eco-anarchist group, Black Mesa Defense; to Washington, DC, as lobbying coordinator of The Wilderness Society in 1977; to finally burning my bridges with the establishment by founding Earth First! in 1980.<sup>4</sup> My observations of events and trends since then have also shaped my views.

New Conservation  
Movement

Let's sit down here by these two different hills (the conservation movements of the '70s and the '90s) and worry them each with a stick and see what we can provoke.

It seems to me that the Old Conservation Movement of the 1970s had the following characteristics:

**Nationals Present Solid Bloc.** During the 1970s, national conservation groups worked to present a solid front. It was crucial, strategists like Doug Scott of the Sierra Club believed, to show unanimity on legislation, in proposals for Wilderness Areas and National Parks, and in positions on agency initiatives. A key part of any campaign was getting all the players on board, and keeping them in line. There were exceptions, of course. The National Wildlife Federation, which did not really become a true conservation organization until the 1980s under Jay Hair, opposed the conservation mainstream on wilderness and wildlife protection as often as it supported it. Friends of the Earth and new groups spawned during the first Earth Day tested independent and more radical positions early in the '70s but by mid-decade were brought into line as part of the solid bloc of the conservation establishment.

**Locals Follow Nationals.** Complementing the solid front of the national groups, local chapters of the Sierra Club and independent grassroots groups like the Montana Wilderness Association and the New Mexico Wilderness Study Committee followed the lead of the big national groups. In campaigns for wilderness there was always "The Conservationist's Alternative," endorsed by national and local groups. There was never a wide spread of proposals ranging from moderate to visionary. The high water mark of such orchestrated togetherness came with Alternative W during RARE II (1977-79), when a cabal of Sierra Club and Wilderness Society staff engineered a single national (and very modest) wilderness proposal endorsed by a multitude of groups. (But as with so many engineered high water marks, the first signs of resistance to enforced unanimity bubbled up out of this RARE II process.)

**Conservationists Support Multiple Use.** In the 1970s, conservationists were tub-thumpers for the concept of multiple use. No group would have considered opposing timber cutting, livestock grazing, mining, oil extraction, motorized recreational development, off road vehicle use, and other extractive uses as legitimate activities on the public lands. We fought pitched battles against logging, mining, and massive ski areas in certain places; we sometimes called for cutbacks in permitted livestock numbers; we urged restrictions on ORVs; but we rolled our beads and mumbled along to the multiple use catechism that in

concept all such activities were legitimate uses for the National Forests, BLM lands, and sometimes even for National Parks and Wildlife Refuges.

**Conservationists Use Anthropocentric Arguments For Wilderness.** In the '70s, Wilderness Areas, National Parks, National Wildlife Refuges, and other protected areas were still viewed primarily as recreational and scenic resources—not as ecological reserves.

Wilderness Areas on the National Forests were established in the 1920s and '30s to keep alive pioneer skills as old time foresters reacted to the smoky spread of Ford's machine. Until the 1980s, conservationists argued most frequently from a recreational (including aesthetic) standpoint for the preservation of Wilderness. Areas proposed for Wilderness status were those with a vigorous constituency of hikers, packers, climbers, fishers, hunters, and such. In most cases, it was the high country with glacial tarns, mountain meadows, and imposing peaks above timberline that drew the support of recreationists. To gain protection for a popular alpine core, conservation groups willingly whittled off from their proposals the surrounding lower elevation lands desired by timbermen—even though these forested areas were far more valuable ecologically than the highlands. I remember a founder of the New Mexico Wilderness Study Committee urging me to pare back my proposed Wilderness acreage on the Gila National Forest in southwestern New Mexico because his small high country wildernesses in the north were more attractive for recreation. He feared that if much of the drier, hotter, less classic landscape of the Gila was designated as Wilderness, correspondingly fewer of the Colorado-like roadless areas in northern New Mexico would be protected. The same old hiker refused to support Wilderness designation for what he considered unattractive lands at Bosque del Apache National Wildlife Refuge. There is even a tantalizing rumor of a California Sierra Club honcho meeting in the '70s where a decision was made to surrender the old-growth forests and concentrate on getting wilderness protection for the recreationally prime high country.

Such conservationists were making a strategic decision. They believed only a limited amount of land would receive Wilderness Area designation; they wanted it to be the areas in which they most enjoyed hiking, camping, fishing, climbing, and hunting.

The arguments for National Parks followed a similar theme. From the beginning with Yellowstone in 1872, it was not wilderness being preserved but the spectacles and curiosities of nature—the

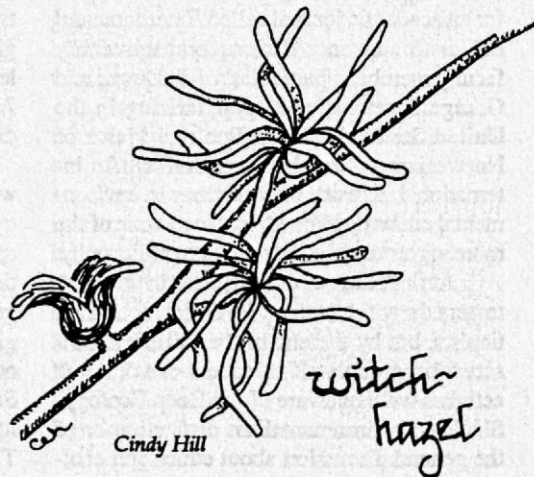
wonders of the world like the Grand Canyon, Yosemite Valley, Carlsbad Caverns, and Crater Lake. Alfred Runte, the preeminent scholar of the National Parks, calls this argument "monumentalism."

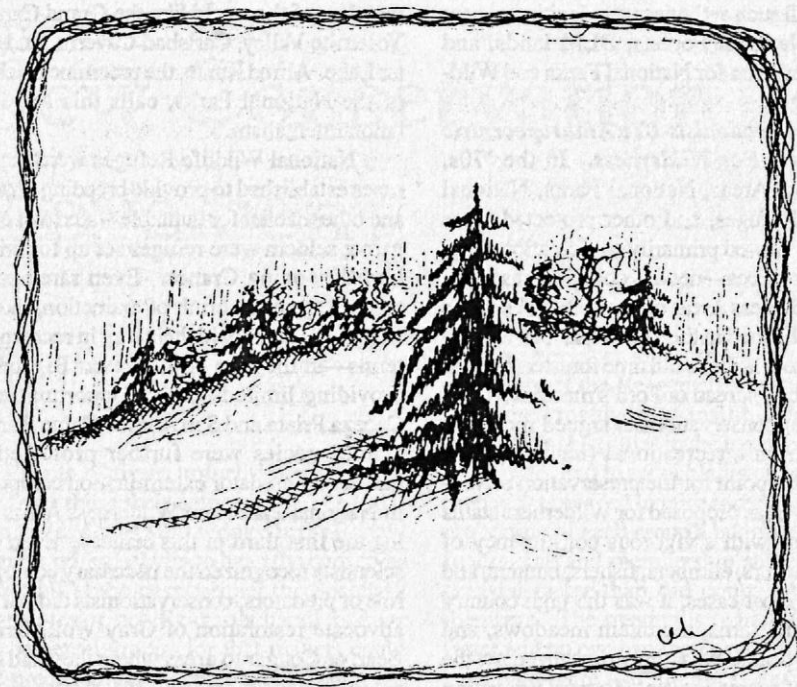
National Wildlife Refuges were in most cases established to provide breeding grounds and other habitat for huntable waterfowl or big game; seldom were refuges set up for critters like Whooping Cranes. Even rare species rescued from the brink of extinction, like the Desert Bighorn, paid their way in recreational terms—in the case of the Desert Bighorn by providing limited hunting opportunities on Cabeza Prieta and San Andres Game Ranges. Game species were further protected for hunters by predator extermination campaigns in National Parks and Wilderness Areas during the first third of this century. Even after scientists recognized the necessary ecological role of predators, conservationists did not dare advocate restoration of Gray Wolf, Grizzly Bear, or Cougar to areas where they had been exterminated.

For all of the protected areas, another anthropocentric rationale was what Runte calls the "worthless lands" argument. We could afford to set aside these areas and restrict full-blown multiple-use exploitation because they didn't have much in the way of resources. This approach, of course, reinforced the willingness of conservationists to exclude rich forestlands, grazing areas, and mineralized zones from their proposals.

Additionally, 1970s conservationists saw Wilderness Areas, National Parks, and Wildlife Refuges as islands—discrete, separate units. They were living museums, outdoor art galleries, backwoods gymnasiums, open-air zoos. Protective classification was not seen as a zoning process, but as the identification of delineated tracts to be honored as the "crown jewels" of American nature. Lines were drawn around these areas and they were viewed as

*continued next page*





Cindy Hill

standing apart from the land around them. Ecological concepts of habitat fragmentation were generally ignored (or unknown) by federal agencies and conservationists alike.



By 1980, these philosophical and organizational foundations were experiencing cracks. The zany excesses of Jim Watt helped the 1980s to become a transition period for conservation, but four other factors were actually more important in cracking the old foundations.

**Academic Philosophy.** During the 1970s, philosophy professors in Europe, North America, and Australia began to look at environmental ethics as a worthy focus for discussion and explication. Sociologists, historians, anthropologists, and other liberal arts academics also began to study attitudes toward nature. By 1980, enough interest had coalesced for an academic journal called *Environmental Ethics* to appear. Also, several university faculty members, particularly Bill Devall and George Sessions, were popularizing in the United States the Deep Ecology views of Norwegian philosopher Arne Naess. An international network of specialists in environmental ethics developed, leading to one of the more vigorous debates in modern philosophy.

At first, little of this big blow in the ivory towers drew the notice of working conservationists, but by the end of the '80s, few conservation group staff members or volunteer activists were unaware of the Deep Ecology-Shallow Environmentalism distinction or of the general discussion about ethics and ecol-

ogy. At the heart of this discussion was the question of whether other species possessed intrinsic value or had value solely because of their use to humans. Ginger Rogers to this Fred Astaire was the question of what, if any, ethical obligations humans had to nature or other species. Interestingly, advocates for intrinsic value and ethical obligations to ecosystems looked back to Aldo Leopold, the originator of the Wilderness Area concept on the National Forests, for inspiration. (One could argue that the evolution of the conservation movement's arguments from the '70s to the '90s recapitulated the personal evolution of Aldo Leopold.)

**Conservation Biology.** Despite the example of early-day wildlife scientists like Aldo Leopold and Olaus Murie, few biologists or other natural scientists were willing to enter the political fray in the 1970s. I remember trying to recruit zoologists, botanists, ecologists, and other scientists at New Mexico colleges to speak out in support of Wilderness Area designation. A handful did, but most excused themselves.

In the 1980s, however, two groups of working biologists appeared who were willing to provide conservationists with information, speak out in public, and even put their reputations on the line over preservation issues. One group consisted of agency scientists<sup>6</sup>: ecologists, botanists, zoologists, soils scientists, and other researchers who worked for the Forest Service, National Park Service, Fish & Wildlife Service, and Bureau of Land Management. These research scientists studied old-growth

forest ecosystems, investigated the needs of Endangered and sensitive species, and calculated the impact of resource extraction on a variety of ecosystems. In the 1970s Howard Wilshire, a geologist with the US Geological Survey, had nearly gotten fired for publicizing his research revealing the unexpected damage done by ORVs. As could be expected, timbermen in the Pacific Northwest called for muzzling certain government old-growth researchers in the '80s as the researchers' findings began to draw attention. Their new data exploded old myths about biological deserts in old-growth and underlined the need to stop the fragmentation of habitats. Their research swayed some agency managers to tread a little easier, but, more importantly, conservation groups began to back up their preservation arguments with facts from the government's own researchers. (Closely allied to this factor of more outspoken scientists in government agencies was the emergence of other employees in the Forest Service and other agencies who, influenced by the scientists and by the conservation movement, began to take a less submissive role within the agencies and to agitate for internal reform. This led to the formation of the Association of Forest Service Employees for Environmental Ethics.)

The other group of ecologists joining the movement were university researchers largely working in tropical rainforests and other exotic locations who suddenly became aware that the natural diversity they were studying was fast disappearing. As their data accumulated, a growing number of them could not deny the inescapable conclusion: due to the activities of industrial human beings, the Earth was in the throes of an extinction crisis greater than any revealed in the geological record. Nowhere in the dusty bins of universities and museums or in the great fossil sites of the world was there evidence for a rate of extinction as high as that occurring in the late twentieth century.

These facts were so shocking—like the sudden buzz of a rattlesnake in tall grass—that a covey of biologists flushed into action and formed a new branch of biology. This "crisis discipline" (a term coined by one of its founders, Michael Soulé) was named Conservation Biology. The new field had dozens of books and a quarterly journal by the end of the 1980s. The warnings of conservation biologists were being heard through the national media. Even some politicians began to listen. By the decade's end *biodiversity* had become a common term and a major issue. Conservation groups like The Wilderness Society hired staff ecologists. The Nature Conservancy redoubled its efforts to purchase ecologically sensitive tracts of land and began to talk about

linkages and corridors. Tropical rainforests attracted much of the attention but temperate habitats in the United States gained considerable notice as well. One example of activist scientists was a group of botanists at the University of Wisconsin who proposed that large blocks of the National Forest acreage in Wisconsin be devoted to the restoration of old-growth conditions.

**Independent Local Groups.** A third factor in rearranging the conservation movement was the growing independence of local wilderness groups. Such groups had begun to appear in the West in the 1960s, but their real development came about in the 1970s through the efforts of The Wilderness Society. During the early '70s, the farsighted Western Regional Director of The Wilderness Society, Clif Merritt, scraped together a small budget to hire field representatives for most of the Western states. Clif thoroughly schooled his underpaid but highly motivated young assistants in the details of the Wilderness Act, the values of Wilderness Areas, and the fundamentals of grassroots organizing. Many observers of the conservation movement agree that Clif's boys were the best such team any conservation group has ever fielded. He was a bulldog believer in grassroots action, and his staff worked just as hard for the local volunteer groups in their states as for The Wilderness Society. Clif instructed his reps to give the local volunteers the credit for accomplishments, and to help organize independent grassroots wilderness groups. Stewart Brandborg, the Executive Director of TWS in Washington, DC, during the period of Clif's organizing, was a believer in "people process" workshops, and all of Clif's reps were indoctrinated through that program to organize and motivate volunteers. Moreover, the wise old lobbyists for The Wilderness Society, Harry Crandell and Ernie Dickerman, opened the doors of TWS's DC office to visiting citizen lobbyists as well as for Sierra Club regional staff on lobbying trips. They taught many citizens the ropes of DC advocacy.

Clif's field reps showed their devotion to the grassroots by working directly with them. Bart Koehler, the Wyoming TWS rep, worked part-time for the Wyoming Outdoor Council and was a founder of the Wyoming Wilderness Association. Joe Walicki, the Oregon TWS rep, organized the Oregon Wilderness Association (later the Oregon Natural Resources Council). As New Mexico TWS rep, I also served as chairman of the New Mexico Wilderness Study Committee and as Rio Grande Sierra Club chapter vice-chairman and wilderness chairman. Wilderness Society reps also spent time working with Sierra Club and Audubon Society chapters in their states—turf wars and struggles for public credit were vir-

tually nonexistent under the non-sectarian eyes of Clif, Brandy, Harry, and Ernie.<sup>7</sup>

By the end of 1978, these old war dogs were gone from The Wilderness Society. Celia Hunter, a much-loved Alaskan conservationist, was also pushed out of her position as acting Executive Director by a Council demanding growth in membership and income. They hired a businessman as Executive Director who proceeded over the course of the next year and a half to fire or drive out almost all of the old field staff.<sup>8</sup> While some went to work for federal or state government agencies, others went back to the grassroots. Jim Eaton, fired as California rep, organized the California Wilderness Coalition and works today as their executive director. Dick Carter, fired as Utah rep, organized the Utah Wilderness Association. Bart Koehler and I founded Earth First!. Bart later became executive director of the Southeast Alaska Conservation Council, where he spent six years leading a successful grassroots effort to overturn the worst sellout in the 1980 Alaska Lands Act—a "compromise" on the Tongass National Forest imposed upon SEACC by the national groups that controlled strategy for the Alaska Coalition.

Concurrent with the changes in The Wilderness Society, a troika of Sierra Club political pros were elbowing Brock Evans out of the loop on Washington strategy. Brock was the most experienced conservation lobbyist left in Washington after the hurly-burly at TWS, and was head of the Sierra Club's Capitol Hill office, although he retained a passion for wilderness and a complete accessibility to volunteer activists. Soon after a managerial shuffle in which he was moved into an essentially meaningless high level position in the Club's hierarchy, Evans took a job with the National Audubon Society to head up a much expanded conservation office in the capital. This move is one of the reasons the National Audubon Society is now the most aggressive, visionary, and grassroots-oriented of the major national groups.

Grassroots reaction to RARE II (which came at the time of the changes in TWS and the Sierra Club) also led to more independent action. The first real grassroots rebel I met was Ned Fritz of the Texas Committee on Natural Resources (TCNR). Fritz, a fiery anticlearcutting lawyer from Dallas, came to Washington on several occasions during RARE II to encourage me and other conservation lobbyists not to cave in to the Forest Service, and to personally press Rupert Cutler—who, as Assistant Secretary of Agriculture, was in charge of the Forest Service—to improve the RARE II program. Fritz later played a key role in launching the New Conservation Movement with his organizing of a

nationwide web of forest reform groups and an annual forest reform PowWow, which has become the principal convention of the New Conservation Movement.

When the Forest Service announced their paltry recommendations for RARE II in 1979, conservationists were aghast. Only 15 million acres, mostly rock and ice, were proposed for Wilderness designation out of 80 million acres still roadless and undeveloped. The EIS for RARE II was deeply flawed and clearly vulnerable to a legal challenge. However, the Sierra Club and Wilderness Society coordinators for RARE II determined that there would be unknown political risks from such a lawsuit. Better to work with key members of Congress to improve the situation, they thought (I must confess that I was part of that milquetoast junta), than piss off members of Congress from timber states with an attack through the courts.

Some local activists chafed under this strategic decision. In Oregon, where the Forest Service recommendations for Wilderness were the worst in the nation, leaders of the Oregon Wilderness Coalition agitated for a RARE II lawsuit. When the nationals stonewalled, OWC began to prepare one themselves. The Sierra Club and TWS arm-twisted the Oregonians out of such a rash action, but this bullying fueled a smoldering independent streak in many wilderness lovers.

Dick Carter, smarting from his unfair treatment by the new executive director of TWS, charted an independent course for his Utah Wilderness Association, although after a few years, Carter's essential conservatism and resource management background (he had worked for the Forest Service) caused UWA to take the opposite tack of OWC and develop more restricted Wilderness proposals than those of the nationals for Utah.

Together, however, the OWC and UWA revolts broke the domination of local groups by the Sierra Club and Wilderness Society. This led to more autonomous action by the grassroots and to the slow spreading, like my middle-aged belly, of the spectrum of wilderness groups during the 1980s.

**Earth First!.** In *Confessions of an Eco-Warrior*, I discuss the whelping of Earth First! out of the mainstream movement, what the accomplishments of that remarkable phenomenon were during the '80s, and why I felt it had largely achieved its practical goals by the late '80s. Here, I want to emphasize something that rarely percolates to the surface in all of the volumes of media hype about Earth First!: The anti-establishment stance of Earth First! was a deliberate, strategic decision designed to effect certain defined goals. We

*continued next page*

founders of Earth First! did not believe that EF! was a replacement for the rest of the wilderness movement. In many respects, it was a kamikaze operation.

In the last chapter of *Confessions*, I sum up the accomplishments of Earth First!:

*Earth First! has led the effort to reframe the question of wilderness preservation from an aesthetic and utilitarian one to an ecological one, from a focus on scenery and recreation to a focus on biological diversity.*

*Similarly, we have gone beyond the limited agenda of mainstream conservation groups to protect a portion of the remaining wilderness by calling for the reintroduction of extirpated species and the restoration of vast wilderness tracts. We have brought the discussion of biocentric philosophy—Deep Ecology—out of dusty academic journals. We have effectively introduced nonviolent civil disobedience into the repertoire of wildland preservation activism. We have also helped to jolt the conservation movement out of its middle-age lethargy and re-inspire it with passion, joy, and humor. In doing all of this, Earth First! has restructured the conservation spectrum and redefined the parameters of debate on ecological matters.*

It was necessary for a group to consciously step outside of the system, to eschew the temptations of political access, to deliberately try to stir the stew: to bring biocentric arguments for wilderness to the fore; to emphasize biological diversity values over recreational and utilitarian values; to help prepare the soil out of which could sprout a necessary spectrum of groups within the wilderness movement; and to make possible the serious

discussion of previously taboo subjects such as predator reintroduction, wilderness restoration, and outlawing of timber cutting and livestock grazing on the public lands. Earth First! could not itself gain the visionary wilderness it proposed or shut down logging on the National Forests. But, intertwined like an orgy of serpents with environmental philosophers, conservation biologists, and independent grassroots groups, the Earth First! movement played a key role in creating the necessary conditions for the emergence of a New Conservation Movement for the '90s—which can accomplish much of what was first proposed by Earth First!.



A different situation exists today in the wilderness preservation movement than ever before. There is an obvious spectrum of groups with differing positions on a variety of issues, and there is no centralized general staff able to dictate national strategy. Things are in a happy boil, and a new vision is challenging old ways of thinking and doing. The cutting edge of wilderness preservation has passed from well-established, wealthy national groups with large memberships and guaranteed political access, to struggling, hungry grassroots organizations with their feet and hearts planted firmly in the wildwood.

Any attempt to stuff dynamically evolving organizations, ideas, and individuals into neat cubbyholes is as fruitless as trying to devise a mathematical rating scheme for wilderness quality. Such categorization, like any verbalized worldview or scientific theory, can only be a crude and temporary device for put-

ting events into context. It must continually be updated. That said, when all the various elements of the current movement to protect the beauty and abundance of the living Earth are put into a boot, shaken, and dumped out on the ground, these scorpions seem to arrange themselves into several reasonably distinct groupings.<sup>9</sup>

One such collection is the *National Mainstream Groups* (the "Gang of Ten"): wealthy, powerful, but increasingly the followers (and sometimes, unfortunately, the thwarters) of new, more dynamic organizations. An unexpected irony is that the most slumbry groups of the '70s—the National Wildlife Federation and the National Audubon Society—are today more brash and farsighted than the old gladiators—the Sierra Club and Wilderness Society. On the telling issue of ancient forests, a leading Oregon activist ranks them (from strongest to most willing to compromise) Audubon, National Wildlife, Wilderness Society, and Sierra Club. He predicts that will be the order in which they shake out on the public lands grazing issue as well.

The next batch is that of the *State or Regional Mainstream Groups*, including those with paid staff—e.g., Greater Yellowstone Coalition, Idaho Conservation League—and those that are entirely volunteer like the New Mexico Wilderness Study Committee. State and local chapters of the big nationals can also be included here. These groups cover a wide swath of the spectrum, with some (e.g., Montana Wilderness Association) playing the 98 pound weakling, and others (e.g., Southern Utah Wilderness Alliance) daring Watt's bullyboys to kick sand in their faces.

## Dave Foreman Stands Trial

This year is the bicentennial of the First Amendment to the Constitution of the United States which prohibits our government from restricting the rights of citizens to speak, publish, and assemble. While paying homage to the Bill of Rights, the government is trying to silence one of the Earth's most important defenders—Dave Foreman. In Prescott, Arizona, the government seeks to send a message to all those who speak out for the Earth: if you challenge the Earth's exploiters you will be treated like a criminal.

Dave has spent 20 years fighting for the Big Outside, speaking for all the life forms and ecosystems not represented in Congress. He has written, lobbied, and organized for those who could not do so for themselves. In the

course of two decades of work on behalf of biodiversity he has made enemies among those who see the Earth only as raw material or as natural resources. The result was his arrest and a later indictment charging him with one count of conspiracy for giving copies of his books to people, and several counts of property damage.

The prosecution has argued that Dave is dangerous. To whom? The Earth? Wild rivers? Make no mistake—it is not just Dave who is on trial. It is all activists, everyone who works to protect the Big Outside, the Wild Earth.

The government has spent several million dollars thus far in its prosecution efforts. If they succeed, more repression will follow. Fortunately a defense team has been assembled—including attorneys Gerry Spence and Sam Guiberson—who are working without charge because they understand the importance of this case to the Earth as well as to jus-

tice. Dozens of volunteers have spent thousands of hours working on the case. But they can't do it alone. They need your help.

At least another \$25,000 needs to be raised to match the government's millions. Americans are forced to pay for prosecuting Dave through their taxes. Your voluntary contributions are critical to Dave's defense and the defense of Earth.

Please give generously and now. Contributions of \$100 or more should be made out to Earth Island Institute/Foreman Defense Fund, and are tax deductible. Checks under \$100 should be made out to Dave Foreman Legal Defense Fund. All contributions should be sent to Foreman Legal Defense Fund, POB 13041, Portland, OR 97213.

Much is at stake here: justice for an individual wrongly prosecuted, preservation of our civil liberties, and preservation of our Wild Earth.

Some of these groups have moved into another category—that of the *Tough Mainstream*. These guys and gals are still operating within the general confines of the mainstream, but are kicking sand in the faces of the buccaneers out to plunder our land. I'd place an all volunteer group like the Committee for Idaho's High Desert and a group with paid staff like the Southeast Alaska Conservation Council both in this category. At least one group here, the Oregon Natural Resources Council, like the legendary camel, has gotten its nose under the tent of Visionary Groups with its recent proposal for Wilderness Areas and National Parks in Oregon's high desert that not only closes roads in order to establish larger Wildernesses but also takes the cowboy gentry head on and phases out livestock grazing in Wilderness. The Oregon Natural Resources Council has also pushed the ancient forest issue further than has any other Mainstream group.

Next, not quite fitting on a linear scale, but spreading out parallel to it, are the *New Professionals*, including the Society for Conservation Biology, and a loose colloquium of environmental ethicists grouped around journals like *Environmental Ethics* and *The Trumpeter*. Individuals range from agency apologists, biostatisticians, and defenders of Lord Man to ecologists and philosophers on the outer limits of the biocentric avant garde. The Association of Forest Service Employees for Environmental Ethics (AFSEEE) may fit in here or in the next category.

Our last wild bunch consists almost entirely of organizations formed within the last several years—*Visionary Groups*. These new groups proceed from a biocentric philosophy that argues for the intrinsic value of native ecosystems. They also come from a visionary political approach that dares to demand what was once off-limits and that applies the new understandings of conservation biology to practical, on-the-ground preservation proposals and land management questions. From an organizational standpoint, I'd divide these groups into three subcategories. There are *regional and local groups*, like the Alliance for the Wild Rockies and the Klamath Forest Alliance, that focus on a particular piece of territory. Then there are *issue groups*, like the Native Forest Council and Wildlife Damage Review, that are not territorial in scope but are oriented to a specific issue. (The newly formed Association of Sierra Club Members for Environmental Ethics—ASCMEE, whose goal is to toughen up the Club, best sits here, too.) Finally there are other entities, like *Wild Earth*; Project LightHawk, the conservation flying service; Cascade Holistic Economic Consultants (CHEC), a consulting group fa-

mous for tearing apart National Forest Plans; free-lance conservation biologist Dr. Reed Noss; and wilderness benefactor Doug Tompkins, who operate to assist the Regional and Issue Visionary Groups.<sup>10</sup>

These Visionary Groups, along with the Specialist Groups, the Tough Mainstream Groups, and some elements of both the National and Regional Mainstream, make up the New Conservation Movement. It is useful to compare the distinguishing features of this movement of the '90s with the characteristics of the '70s movement that I previously outlined.

**Solid Bloc.** Today, there is a range of groups with positions on issues, and Wilderness Area proposals, ranging from highly compromised to bold and visionary.

**Following Nationals.** Today, the leadership in the conservation movement has devolved from mainstream national groups like the Sierra Club to new visionary groups or to recently emboldened older groups. Although some state and local affiliates of NWF, NAS, and SC are timid and easy to roll (Sierra Club in Oregon, Arizona Wildlife Federation, etc.), others belong in the categories of Tough Mainstream or even Visionary (Marble Mountain Audubon, New York City Sierra Club, Oregon Wildlife Federation).

Furthermore, independent national, issue, state, and local groups (Alliance for the Wild Rockies, Native Forest Council, AFSEEE, Oregon Natural Resources Council) are walking point for the conservation movement today. They are pioneering the ideas, positions, and techniques that the large, well-funded and staffed National Mainstream Groups will probably be following in half a decade. At the very least, they are not taking orders or strategic direction from what some observers consider to be increasingly irrelevant large national groups.

**Wilderness Concept.** The New Conservation Movement has largely turned its back on the old concept of Wilderness as primarily a recreational resource. Their arguments are solidly based in conservation biology, and recognize biological diversity as the fundamental value. Articulated and further developed by the visionaries, such ideas and reasoning are trickling down into the National Mainstream. No longer are Wilderness Areas and National Parks viewed as islands of solitude for harried urbanites, but as core preserves in an unfinished North American system of ecological preserves linked together to provide necessary habitat for viable populations of sensitive and wide-ranging wilderness-dependent species, like Spotted Owl, Gray Wolf, Florida Panther, Ocelot, Grizzly, and many less "charismatic" species.

**Multiple-Use.** The Visionary Groups and even some of the Tough Mainstream Groups (preeminently the Oregon Natural Resources Council) no longer accept all of the traditional "multiple-uses" on the public lands. The Forest Reform Network calls for outlawing clearcutting; the Native Forest Council demands the protection of *all* remaining old-growth and other natural forests on the National Forests; the Public Lands Action Network criticizes livestock grazing on the public lands; Wildlife Damage Review pushes for the abolition of Animal Damage Control; the ORV Task Force wants a prohibition of ORVs. Lip service to the legitimacy of logging, mining, grazing, ORVing, predator control, and other destructive uses of the public lands is no longer forthcoming as it once was from the conservation community.



It is a steep, rocky trail the New Conservation Movement must travel through the coming decade. Alongside it, behind rocks and trees, skulk goblins—some are terrifying things while others are delightful sirens. While knowing about each will not prevent the need to wrestle it when we meet it, knowledge will help us plan how best to grapple with each. The goblins I know about are these:

**Invitation to the Smoke-filled Room.** As the biocentric, biodiversity ideas of the New Conservation Movement are debated, they will trickle down into the rhetoric and platforms of mainstream groups and finally down to the nether depths of government agencies and politicians. When this happens, we will be invited into the smoke-filled rooms to cut deals and join in "management." We will be sorely tempted to compromise for such political access, such credibility. We need to guard against this and recognize the fundament of conservation activism: Our job is to argue for the natural world. We speak for Wolf. It is not our task to make the ultimate political compromises but to push those who do (politicians and bureaucrats) as far as we can toward our positions. This beguiling little goblin may be the most persuasive and the most dangerous to our cause. Avoiding future moderation will be a major challenge for the New Conservation Movement.

**Siren Song of the True Believer.** I discuss in *Confessions* the alluring invitation to become a True Believer. When we fall prey to this goblin, we lose patience with others, lose tolerance for approaches different from ours, and begin to believe that those less strong are miserable sell-outs and traitors. Not only is this not fair, it is counterproductive, and it is damaging to our personal mental health.

*continued next page*

**Confrontation Forever.** I also discuss this goblin in *Confessions*. It demands that we demonize all those we disagree with. We must carefully gird ourselves against allowing the need to sometimes be confrontational and uncompromising take over our entire lives.

**Marathon of Burn-out.** Being a wilderness activist is exhausting. Unless we follow Ed Abbey's advice and enjoy the wilderness we are trying to save, we will turn into bitter, ineffective little cinders. "Joy, shipmates. Joy!" Get out there and stare into sunsets, perfect your fly cast, learn how to differentiate Empids, and woo the Big Outside.

**Maw of Fear.** Violent reaction to our efforts to defend the wild will come from G-men trying to railroad us into court and prison, from editorialists who will cast us as bone-grawing Huns on the outskirts of Rome, and from industrial goons who will intimidate us, beat us, and even kill some of us. The weather will grow nasty before it clears. One does not have to have scraggly hair, or sit in front of chainsaws, or dribble sand into bulldozers to draw this reaction of outrage and threats. If we effectively campaign for the preservation of the natural world, we will step on the toes of somebody trying to make a fast buck, or somebody enjoying an ersatz sexual sensation by ripping the wild apart. These people are violent. Fear will well up inside of us as we see others threatened, or are ourselves threatened. It will not be an easy ride.

**Despair of Destruction.** As more great trees crash to the ground with a sickening shudder, as more species march into that long, dark night that has no dawn, as the fever in the body of Earth climbs yet higher, we will become victims of despair. We, who are willing to open our souls to love this glorious, luxuriant, animated planet, will be mightily bruised as that glory is tarnished, that luxuriance is shorn, and that animation is mechanized. Perhaps only the true knowledge that the destruction would be much worse without our brave efforts will buoy us through the dark days ahead.

Doubtless, there are goblins squatting silently next to the trail ahead about whom I have not yet dreamed. It is a long, rocky, fearful trail. But there is no other.



This hasty overview of a rapidly evolving and extremely dynamic conservation movement is sketchy at best, like a rough, hand-drawn map of the back of beyond for all of North America. The following articles from representative groups constituting the New Conservation Movement are like more detailed maps of specific wild areas. But remember: The map is never the territory. To really un-

derstand the New Conservation Movement, you ultimately have to put down the maps and guide books and get its mud and dust on your boots. Pick your issue or your section of the Big Outside and devote your heart and soul to it. Then the next time you step into a protected Wilderness, you will know you deserve that visit. The next time you hear goose music overhead, you will know you have paid the admission price for that symphony.

## FOOTNOTES

<sup>1</sup> There are, of course, exceptions to this statement as there are for virtually everything herein. This is a discussion of trends, which are by nature general.

<sup>2</sup> Groups like Defenders of Wildlife that failed to leap on the treadmill early found it difficult to get on it at all, even though they, too, began to level small woodlots to fill mailboxes with membership and contribution appeals. Despite the feverish efforts of the late ones to elbow in on the feeding frenzy at the smorgasbord table of new members, they've had trouble keeping their original membership levels.

<sup>3</sup> I am restricting myself in this article to discussing the public lands conservation movement in the United States, not the environmental movement or the animal rights movement. There are parallels with the histories of the environmental and animal rights movements during the same period, however. Greenpeace is a particularly good example of the effects of the fundraising treadmill and resultant moderation. The influence of direct action groups (like Earth First! and the Sea Shepherd Conservation Society) played a significant role in causing the changes discussed in the following paragraphs, but in general I believe such direct action (with the exception of Sea Shepherd's highly effective ocean defense) is of less importance in the 1990s than during the transition period of the 1980s.

<sup>4</sup> During the 1970s I worked as an employee of a national conservation group (The Wilderness Society), an officer in a chapter of two other national groups (Sierra Club and Nature Conservancy), president of a grassroots local group (New Mexico Wilderness Study Committee), founder of a national group (American Rivers Conservation Council), member of a state advisory committee (New Mexico Governor's Wilderness Committee), member of a federal advisory committee (Secretary of Energy's Geothermal Advisory Committee), and chairman of a political conservation group (New Mexico Conservationists for Carter 1976).

<sup>5</sup> Of the 80 million acres of National Forest land that were roadless and undeveloped during RARE II (the second Roadless Area Review and Evaluation), the conservation coalition proposed only 35 million acres

for protection.

<sup>6</sup> A little-known pioneer was the Forest Service's George Davis, who included ecosystem representation among the selection criteria for proposed Wilderness Areas in RARE II.

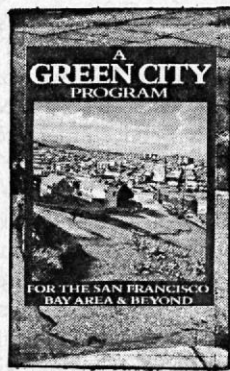
<sup>7</sup> There was a fierce struggle for control of The Wilderness Society during the early and mid-1970s that put some of these men on opposite sides. That does not change the truth of the story I am telling here—that the executives of TWS in the '70s were utterly devoted to building a powerful grassroots network for Wilderness preservation. Of course, this network was strongly influenced, if not controlled, by TWS staffers. It is interesting to note that Merritt and Brandborg have both retired to Montana and are active supporters of the Alliance for the Wild Rockies today.

<sup>8</sup> Although TWS has done some good things since the "great firing," and has had some fine field reps, it has lost its focus on the grassroots.

<sup>9</sup> Individual staffers or volunteer leaders of different groups may also fit at different spots on this spectrum.

<sup>10</sup> Some of the Visionary Groups evolved out of the Earth First! movement.

## RETHINKING CITIES



*"These are the beginnings of what could become a total approach to urban health, as we move from the obsolete 'more is better' assumption to a concern with urban quality, transforming our beleaguered cities into communities that are ecologically sustainable because they are consistent with the life-support system provided by nature."*

— Harold Gilliam

by Peter Berg, Beryl Magilavy,  
and Seth Zuckerman

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# Alliance for the Wild Rockies

POB 8731, Missoula, MT 59807  
406-721-5420

The Wild Rockies Bioregion, spanning five states (Montana, Idaho, Wyoming, Oregon and Washington) and two Canadian provinces (British Columbia and Alberta), consists of five intact ecosystems and their connecting corridors. It provides critical habitat for Caribou, Gray Wolves, Grizzly Bears, anadromous fish and a host of other endangered plants and animals, in addition to world-class ungulate and game fish populations. Most Americans are unaware, however, that the vast bulk of this public land is unprotected and threatened. World-renowned biologists are now warning that further fragmentation and elimination of roadless country will cause an irretrievable depletion of wildlife populations.

Many people are familiar with the great National Parks of the region. Glacier, Yellowstone, Jasper and Banff National Parks represent the core areas of ecosystems that are still essentially self-regulating and contain almost all of their native flora and fauna. The other ecosystems, and the biological corridors that connect them, are less well known but no less important. The Hells Canyon ecosystem contains the deepest river-carved canyon in the world and the nation's largest free-roaming Elk herd. The Cabinet/Selkirk/Yaak ecosystem, while badly damaged by heavy logging and a maze of roads, still contains undisturbed ancient forests, and critical habitat for the return of the Woodland Caribou, Gray Wolf and Grizzly Bear. The Greater Salmon ecosystem

is centered around the lower 48's largest Wilderness complex (the Frank Church River of No Return and Selway-Bitterroot Wilderness Areas) and contains incredible biological and landscape diversity. Maintaining the ecological integrity of the Bioregion demands the complete protection of remaining roadless lands and connecting corridors between major ecosystems, and the ecological restoration of damaged areas.

The Alliance for the Wild Rockies (AWR) was formed in 1988 to work for comprehensive protection of biodiversity within the major wildland ecosystems in the Wild Rockies, by combining cutting-edge scientific information with grassroots organizing. AWR is building a network of groups and individuals across the nation to elevate the issues to the national level. Over 120 conservation organizations and businesses and over 1000 individuals from all 50 states have joined the Alliance.

Habitat fragmentation due to road-building, logging, mining and other developments has severe effects on wildlife, water quality and ancient forests. The public subsidizes most of these developments through Forest Service road construction projects and below-benefit timber sales, mineral leasing tax incentives and outright giveaways under the 1872 mining law, and subsidized grazing on federal lands. The economic history and politics of the region have been dominated by natural resource extraction industries; and heavily-funded lob-



bying by industrial interests has led politicians to commit most wildland resources to development. In addition, the allocation of roadless federal lands has historically been treated as a state issue, dominated by the industries and reeking of back room deals cut by co-opted conservationists.

Legislative protection under the 1964 Wilderness Act is the best way to secure permanent protection for ecosystem centers and biological connectors, and that's what the Alliance has proposed as part of The Northern Rockies Ecosystem Protection Act of 1991. This sweeping proposal would protect 15 million acres of pristine federal lands in the states of Montana, Idaho, Wyoming, Washington and Oregon by using existing land designations, like Wilderness, National Park and Preserve, and Wild and Scenic Rivers. The proposal would also designate a new Wildland Recovery System, and establish the Wildland Recovery Corps to create jobs restoring areas that have been damaged by poor land management. In the recovery system, unneeded roads would be removed and revegetated, slopes stabilized and recontoured, denuded areas replanted, and critical fish and wildlife habitat restored. The proposal is the first step in a long-term bioregional conservation strategy.

Protecting the largest wildland region south of Canada is imperative. Combining the science of conservation biology and grassroots advocacy, we seek ecosystem protection in perpetuity. We need help! In addition to membership and financial contributions, the Alliance needs citizen advocates throughout the country who can distribute information, organize letter-writing campaigns, and host public presentations. Memberships are \$15, \$25, or \$50 and include a subscription to the quarterly newsletter, *The Networker*, and timely issue alerts.

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# Association of Forest Service Employees for Environmental Ethics

POB 11615, Eugene, OR 97440  
503-484-2692

The Association of Forest Service Employees for Environmental Ethics (AFSEEE) seeks to forge a socially responsible value system for the US Forest Service based on a land ethic which ensures ecologically and economically sustainable management.

We believe that land is a public trust, to be passed with reverence from generation to generation. Humankind has no right to abuse the land. The Forest Service and other public agencies must follow the footsteps of Aldo Leopold, a pioneer of conservation, and become leaders in the quest for a new resource ethic. This quest involves reaching out to all segments of the public to develop strategic visions for forest management in harmony with the environment and society's evolving values system.

Since 1989, AFSEEE has grown to more than 5000 members, representing current, former and retired Forest Service employees,

other federal and state employees, concerned citizens, educators, and public interest organizations. With a national office in Eugene, Oregon and ten local chapters throughout the country, AFSEEE pursues its goal of revitalizing the FS value system through providing an avenue for freedom of expression, providing a support system for agency employees, encouraging activism, and educating individuals about the condition of our public lands.

In the 1970s, as the rampant environmental degradation of the National Forests came to light, the American public became increasingly concerned with the pro-development posture of the Forest Service. Congress reacted by passing the National Forest Management Act (NFMA) in 1976.

The Forest Service has consistently violated both the letter and the spirit of this act. The National Forest Management Act mandates that the FS manage for biodiversity, yet

the agency is overcutting, overgrazing, and over-developing National Forests. NFMA states that the agency will do continuous research and monitoring to ensure that the health of the forests is maintained. Such research has not been conducted.

During the next year, AFSEEE will focus on three goals:

1. Eliminate hard targets for commodity outputs (timber, mining, and grazing); plan and budget from the ground up; redirect funds toward ecological restoration.

2. Protect all remaining old-growth forests and roadless areas on public lands.

3. Protect the free speech rights of government employees. Encourage employees to exercise these rights.

It is not yet too late to turn back the tide of Forest Service negligence toward our precious resources. With the support of our members and friends we can move toward a new resource ethic that recognizes the value of our public lands and honors the responsibility to preserve our National Forests.

Articles, graphics and information can be sent to AFSEEE's publication, *Inner Voice*, regarding abuses on public lands, free-speech violations, or good examples of Forest Service management. Send material on a 3.5 inch disc or type written, if possible, to AFSEEE/Inner Voice.

—Jeff DeBonis, Executive Director

## Biodiversity Legal Foundation

POB 18327, Boulder, CO 80308-8327

The Biodiversity Legal Foundation is a national, non-profit organization dedicated to the preservation and restoration of all native wild plants and animals, communities of species, ecosystems, and natural landscapes in all regions of North America.

Biodiversity is life and all that sustains life. The Biodiversity Legal Foundation (BLF) was formed in response to the continuing loss of wildlife habitat, the fragmentation and destruction of natural ecosystems, and the failure of the state and federal governments to protect biological diversity on our public lands. The BLF recognizes that we are at a point in history where biological systems cannot be further compromised. Thousands of native species in the United States are in immediate danger of being extirpated and the natural processes of wildlife dispersal and recolonization are being brought to an end by

habitat destruction. The laws and regulations intended to protect native species and their habitats are not being enforced. Main-stream environmental groups have failed to vigorously defend whole ecosystems, and have overlooked many "non-charismatic species."

The BLF intervenes through cutting-edge administrative and legal work on behalf of sensitive, rare, threatened, and endangered species, and the natural ecosystems upon which their survival depends. Strategies are designed to prod government agencies to enforce conservation law. The BLF becomes involved in legal cases on behalf of grassroots activists when the mainstream groups are unwilling to help or when the mainstream groups' positions are too weak and compromising. Pro bono attorneys in four states and in Washington, DC, are working with the BLF. Edward W. Mudd Jr. serves as staff attorney.



BIODIVERSITY  
LEGAL  
FOUNDATION

Endangered species programs have tended to emphasize species already on the threshold of extinction. In contrast, the BLF stresses taking habitat protection and restoration measures in advance, while species' populations are sufficiently healthy to allow recovery in the wild. The BLF takes a multiple species/ecosystem approach in its administrative and legal actions.

### A BIOCENTRIC PERSPECTIVE

The reason for saving plants and animals is not so they can be exploited for human use. All natural things have intrinsic value. They have a right to exist for their own sake. A healthy environment for all native life forms

includes a richer and healthier environment for human beings.

## ONGOING ACTION PROJECTS

*Addressing the failure of the US Department of Interior to enforce the Endangered Species Act:* One of the BLF's major concerns is the US Fish and Wildlife Service's large backlog of unlisted species. About 1000 high priority candidate species, most of them critically imperiled globally, are in need of immediate listing and protection under the ESA. Improper political and economic concerns, as well as inefficient listing procedures, may be delaying the listing of many of these species. The Biodiversity Legal Foundation is taking a nation-wide, multiple-species approach to this problem, promoting the cluster listing of all ESA candidate species by ecosystem in the United States.

In addition, through grassroots activists with appropriate court standing, the BLF is preparing to challenge the failure of the Fish and Wildlife Service to effectively implement the Section 7 requirements of the Endangered Species Act. That legal challenge is already under way on behalf of the Grizzly Bear, a federally listed Threatened Species. [See article this issue.]

*Rare and Endangered Amphibian Pro-*

*gram:* Scientific evidence indicates that amphibians are in decline in the Western states and in other areas of North America. Leopard Frogs, Western Toads, Spotted Frogs, and Tiger Salamanders are experiencing serious population declines. The loss of amphibians, which in many ecosystems constitute a major component of the food web, could lead to significant ecological disruptions in many areas. These declines provide further indication of the destruction of riparian/wetland ecosystems in the arid West, though other factors, such as acid rain and stratospheric ozone depletion, are probably also involved.

The BLF is encouraging state and federal agencies to initiate ecosystem studies that focus on specific indicator taxa, such as amphibians, particularly in the Western states. Comprehensive studies at the level of entire ecosystems are urgently needed.

*Monitoring water projects threatening aquatic ecosystems:* The BLF is monitoring both the monstrous Central Utah Project and proposed Animas-La Plata project. It has identified and is tracking the status of 31 ESA candidate, Threatened and Endangered species that could be adversely impacted by the Central Utah Project. Legal action has been threatened to secure adequate protection for the Spotted Frog (*Rana pretiosa*), Ladies' Tresses (*Spiranthes diluvialis*), and the Ra-

zorback Sucker (*Xyrauchen texanus*). A coalition including the US Forest Service and Coors has recently attempted to interfere with the federal listing and protection under the ESA of Ladies' Tresses, a rare orchid associated with riparian/wetland sites in Utah and Colorado.

*Species campaigns:* The BLF is working to secure protection for the following rare species and their habitats: Lynx, Northern Goshawk, Longnose Darter, Sherman's Fox Squirrel, Flat-tailed Horned Lizard, Uncompahgre Fritillary, Least Chub, Grizzly Bear, Timber Rattlesnake, Eastern Wood Rat, Alabama Shovelnose Sturgeon, Woodland Caribou, and Amargosa Toad. The ecosystems of most of these species are in the process of ecological collapse.

## WHAT YOU CAN DO

The Biodiversity Legal Foundation is in its infancy and is presently supported only by private donations. It needs large and small donations for general support as well as for the specific projects described above. The Biodiversity Legal Foundation is pending certification with the IRS as a 501(C)(3) tax-exempt organization.

—Jasper Carlton, Executive Director

## Recent BLF Actions

### 60 DAY NOTICE TO EPA

Lawyers in Alabama have notified the US Environmental Protection Agency of their intent to sue that agency for failing to enforce the mandates of the Endangered Species Act. The notice claims that the EPA consistently fails to participate in Section 7 consultations in Alabama when the state's environmental agency [Alabama Department of Environmental Monitoring, ADEM] issues NPDES [National Pollution Discharge Elimination System] permits.

These permits, issued pursuant to the Clean Water Act, are little more than licenses to pollute. Yet they can have devastating consequences on Endangered, Threatened, or sensitive aquatic species downstream of a permittee's effluent.

The notice to sue alleges that EPA, by delegating its responsibility to Alabama in this area, is ultimately responsible for the continued well-being of the state's aquatic ecosystems and the federally listed species dependent on those ecosystems.

Two species are at the heart of the issue: the Cahaba Shiner (listed as Endangered) and the Goldline Darter (proposed as Threatened), both found in America's most biologically diverse river for its size, the Cahaba. The Biodiversity Legal Foundation has targeted the Cahaba River as one of its primary aquatic issues.

### COMMENTS ON CHIPPER MILLS

The Tennessee Valley Authority (TVA) has received requests by Korean "chipper mills" for permits under the Clean Water Act. If issued (jointly by the Army Corps of Engineers), the permits would allow applicants to construct mills that convert hardwood trees into wood chips (later used in the manufacturing of pulp). The permits pertain to the applicants' desire to build loading docks on the banks of the Tennessee River. The chips would be loaded on barges, floated down the Tennessee Waterway (through Alabama) to (state-funded) docks in Mobile, and on to Korea.

The TVA's original environmental assessment (EA) was just short of negligent. It refused to consider such things as cumulative

impacts and reasonable alternatives.

The Biodiversity Legal Foundation, along with other groups, filed comments to TVA demanding a full-blown environmental impact statement (EIS) pursuant to NEPA (National Environmental Policy Act). BLF also demanded that the agency consider all impacts caused either directly or indirectly by the proposed action.

To date, TVA has agreed to prepare an EIS. Agency rhetoric suggests they are predisposed to issue the permits. Legal action may be needed.

This issue is very important, not just in terms of natural diversity in the South, but in all regions of the country possessing large areas of hardwoods. This "new" industry plans to conduct massive clearcuts to obtain cheap wood chips. For information on this issue, or a copy of the EIS, write M. Paul Schmierbach, Environmental Quality, TVA, 400 W Summit Hill Dr, Knoxville, TN 37902.

The BLF is currently tracking the discharge of various toxic pollutants into the sensitive ecological components of the nation's waters. A focus is on how these chemicals,

*continued next page*

especially organochlorines, affect aquatic species in terms of reproductive problems, mutagenicity, etc.

BLF is concerned that the various regulating agencies are disregarding the cumulative impact of toxic pollutants, especially the chemicals' synergistic effects on sensitive aquatic ecosystems. Where evidence illustrates problems for Endangered, Threatened, or sensitive species, BLF will consider legal tactics to remedy the problem.

—Ned Mudd Jr., BLF attorney

## LEGAL ACTIONS FOR GRIZZLY HABITAT

In response to the failure of federal and state agencies to protect the habitat of Grizzly Bears (*Ursus arctos horribilis*) in the contiguous United States, Jasper Carlton of the Biodiversity Legal Foundation has formally petitioned the US Fish and Wildlife Service to designate critical habitat for the Grizzly Bear in the Northern Continental Divide, Greater Yellowstone, Selkirk, and Cabinet-Yaak Ecosystems.

Carlton also filed a parallel petition to reclassify Grizzly Bears in the Cabinet-Yaak, Selkirk, and North Cascades Ecosystems as Endangered. The Grizzly Bear is presently only listed as Threatened under the Endangered Species Act, even though there is little or no dispute in the scientific community that the Grizzly Bear is *biologically* seriously endangered in these ecosystems. Since the

managers of the National Forests that make up most of these border ecosystems (Colville, Idaho Panhandle, Kootenai and Flathead National Forests) continue to allow fragmentation and degradation of Grizzly habitat, it is essential that the legal status of bears in these areas reflects their biological status, providing these bears with full protection under the ESA.

FWS has accepted both petitions and a decision on whether the requested actions are warranted is expected soon. Carlton considers the government decision on both petitions to be subject to judicial review.

In related news, the BLF has declared inadequate the Revised Grizzly Bear Recovery Plan. If major revisions are not made, to better protect Grizzly habitat, in the Final Revised Grizzly Bear Recovery Plan due out this summer, Carlton promises a broad-based legal challenge of the entire Grizzly Bear Recovery Program.

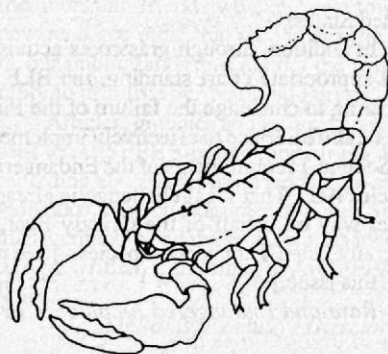
## SEARCH FOR GRIZZLIES IN SAN JUAN ECOSYSTEM INTENSIFIES

The Biodiversity Legal Foundation and the EF! Biodiversity Project are sponsoring a series of bear den emergence aerial surveys in the San Juan Ecosystem of Colorado this spring. The purpose of these surveys is to observe and plot any possible Grizzly Bear dens within the known historic range of the Grizzly in the San Juan Ecosystem. The aerial surveys will cover an area of about 1000

square miles and will concentrate on appropriate Grizzly Bear denning sites close to areas of known bear mortalities and of reported sightings or signs during the past 30 years. Ground checking of any suspected dens would be accomplished by early summer.

This research is being undertaken to determine if tenacious individuals survive in the San Juan wilds. No comprehensive aerial surveys were conducted following the killing of a Grizzly by a hunter in 1979. Ongoing development activities by the US Forest Service in the San Juan National Forest, such as road-building, as well as proposed developments, such as the East Fork Ski Area, are proceeding without adequate consideration of the Ecosystem as a potential Grizzly Bear recovery area.

—Jasper Carlton



Jackie Taylor

## Federal Forest Reform

5934 Royal Lane, Suite 223, Dallas, TX 75230  
214-352-8370

Federal Forest Reform is an association devoted to reforming federal timber programs. It is engaged in nationwide campaigns to repeal or restrict the Knutson-Vandenberg Act, Brush Disposal Act, and Salvage Timber Sale Act, and to pass the Forest Biodiversity and Clearcutting Prohibition Act. Below, we explain these acts. FFR is a member of Save America's Forests, a national not-for-profit coalition.

### THE KNUTSON-VANDEMBERG ACT

#### *How the Forest Service Perverted An Obsolete Fund into a Kitty for Clearcutting*

In 1930, Congress gave the US Forest Service a deal: Every time you foresters agree

to apply the proceeds from a timber sale to reforesting a stand, you can allocate money from the sale into a fund to pay for clearing the site and planting a new stand. Just tell Congress each year how much you anticipate allocating to this work, and you can have that amount.

At that time, the Organic Act of 1897 forbade the Forest Service (FS) from practicing even-age logging (clearcutting, seed-tree cuts, shelterwood cuts, large-group selection). So, after the FS had reforested the cotton fields and other denuded lands that it had acquired, along with good forests, during the Great Depression, it had limited opportunity to abuse the Knutson-Vandenberg (KV) privilege.

By 1964, though, the FS had gotten away with some illegal clearcuts on the West Coast.

As distinguished from turn-of-the century clearcuts, where the ecosystem had been allowed to restore itself, these technocratic clearcuts utilized site preparation and planting, with the purpose of suppressing species of plants that compete with commercial species. The Forest Service soon was executing massive clearcut sales from coast to coast, allocating to itself enough funds for site preparing and planting in these clearcuts, and thereby vastly increasing its budget. KV allocations soared.

The technocratic clearcutting drew a wave of protest. In 1972, a Natural Resources Defense Council lawyer, Laurence Rockefeller, dusted off the Organic Act and filed the famous Monongahela case. The trial and appellate courts found that Forest Service clearcutting sales violated the Act. They enjoined the FS from further clearcutting in Monongahela National Forest. The effect was curtailment of Forest Service clearcutting throughout the jurisdiction of the Fourth Circuit, including West Virginia, Virginia, and North Carolina.

The Forest Service did not appeal. If the Supreme Court had affirmed the Monongahela decision, this would have ended clearcutting in all National Forests. Instead, in 1975 the agency contented itself with rampant clearcutting in all regions outside the Fourth Circuit, while going to work with its main lay support group, the big timber industry, for relief in Congress.

In July 1976, Texas Committee On Natural Resources (TCONR) brought a Monongahela-type lawsuit in Texas and won a preliminary injunction against clearcutting in the four National Forests there. The walls were tumbling down. Congress quickly came to the rescue of the bureaucracy. In passing the National Forest Management Act (NFMA), Congress repealed the clearcutting ban nationwide, and expanded KV to allow allocations for wildlife and other "sale area improvements." As a result, wildlife biologists and others in the Forest Service now have a financial incentive to collaborate with the timber producers in increasing timber sales. In their efforts to obtain more KV dollars, the various FS disciplines tend to claim benefits to wildlife or whatever cause is involved in a particular allocation, but the result is increased clearcutting.

By 1989, the KV allocations reached \$229 million per year, having quadrupled since 1964. The Forest Service uses about half that much for site preparation and planting. The FS site prepares and plants single species even after seed-tree and shelterwood cuts, where, in theory, the seed trees are left standing for a while in order to regenerate the stand naturally. In Texas, environmentalists documented case after case where the FS bulldozed adequate densities of natural seedlings (800-1500 per acre) in shelterwood cuts to plant nursery pines. The FS gave as its reason the superiority of the nursery seedlings. This defense was not convincing in light of (1) greater resistance of naturally regenerated trees to insects, disease, and bad weather; and (2) the high cost of site-prep and planting.

Due to bureaucratic inertia and the perverse incentive provided by KV to engage in site preparation and planting, the Forest Service uses predominantly even-age logging, nationwide. Here are some of the effects:

- Soil losses several times greater than after selection cutting.
- Nutrient losses often 20 times as bad.
- Sedimentation of streams, which worsens flooding and decimates aquatic life.
- Increased susceptibility of trees to insects, diseases, and acid deposition.
- Blowdowns along edges of cuts.
- Exacerbation of the greenhouse effect.

Recently, under fire, the Forest Service has increased the wildlife share of KV to about

15% nationwide. Unfortunately, a substantial fraction of these wildlife allocations has gone to game species "improvements," such as building ponds for deer.

Within the one-fourth of KV funds that do not go to site preparation, planting, and overhead, the Forest Service applies a small fraction to "improvements" of endangered species habitat. An example of this is removal of the midstory and understory in groves where Red-cockaded Woodpeckers nest and roost. To maximize its budget, the FS has plunged into such removal activities with a vengeance. In February 1988, the supervisor of the Texas National Forests instructed his rangers to maximize KV allocations from timber sales for use in midstory removal. In the ensuing Red-cockaded Woodpecker (RCW) trial, the FS asked the court to let midstory hardwood removal continue. The court allowed it, but also ordered an end to even-age logging in RCW habitat.

As this example indicates, the Forest Service has a budget-padding incentive toward costly kinds of wildlife management, instead of letting habitat restore itself at little or no cost. Many of these "improvements," such as deer ponds, harm the native forest ecosystem, favoring one or several common game species.

Another evil of Knutson-Vandenberg is its incentive toward sales-below-cost. The KV Act allows the Forest Service to allocate funds to itself out of *gross* revenue, rather than merely out of the *net*. Therefore, the FS has an incentive to take a KV allocation even if after deducting the allocation, the revenue drops below the cost of making the sale. The US Treasury loses money. The FS gets its KV money, regardless. In almost every sale-below-cost, a KV allocation is at least part of the cause.

According to forest economist Randal O'Toole, of the 122 National Forests, all lost money (failed to achieve net receipts) on their 1989 timber programs except the following: the Lassen, Modoc, and Six Rivers in California; the Allegheny in Pennsylvania; and most forests in Oregon and Washington (where the Colville, Deschutes, Okanogan, Siskiyou, Umatilla, Wallowa-Whitman, and Wenatchee lost money).

For the above environmental and economic reasons, Friends of the Earth and Texas Committee On Natural Resources asked Congressional appropriations committees in 1990 to limit KV funds to 25% of the *net* receipts from timber sales. Representatives John Bryant (D) and Steve Bartlett (R) from Dallas testified for this limit. Representative Sidney Yates (D) of Illinois, obtained its passage by the House subcommittee that he chairs.

At that point, the National Forest Products Association sent a briefing sheet to the full

committee chair, Jamie Whitten (D) of Mississippi, who replaced the limit with the following language in the Committee Report: "The Committee is also very concerned about the lack of accountability regarding expenditures under the Knutson-Vandenberg Fund."

The Report then directs the FS to give a detailed accounting, by 1 March 1991, Forest by Forest, of how KV deposits are determined, how they are used, and what is spent on administration and overhead. Before final passage, the Conference Committee Report added a direction for details on how much goes to wildlife management and how it is used.

The Wildlife Management Institute, created and sponsored by members of the American sporting firearms and ammunition industry, has claimed to its members, mostly hunters, that it played a role in watering the measure down to this mere request for data.

The Forest Service's 1991 data report may lead to reform in the next session of Congress. For the first time, the agency must come forth with details. When the public knows all the facts, Congress is likely to restrict or to repeal KV.

In 1991, TCONR and FOE intend to expand the KV reform campaign to include two similar revolving trust funds. The Brush Control Fund goes mainly to clearing and burning the remnants of even-age logging, to the tune of \$64 million in 1990. The Timber Salvage Fund, which received \$60 million in 1990, results in more even-age plantations.

In addition to allocations to these three trust funds, the Forest Service receives annual itemized appropriations from Congress for site preparation, planting, and salvage sales. In 1991, Congress directly appropriated an extra \$50 million for salvage sales. It is quite conceivable that Congress would increase these appropriations enough to offset any savings that would accrue from eliminating the trust funds. But without these trust funds, the FS would lose the budget-padding incentive to make sales-below-costs and even-age sales. It would also have to justify all its expenditures annually to the appropriations committees of Congress. Those committees are becoming more alert to the disadvantages of letting the FS allocate timber sale receipts to its own harmful uses.

## FOREST BIODIVERSITY AND CLEARCUTTING PROHIBITION ACT

Representative John Bryant (D-TX) has introduced HR 1969 to prohibit clearcutting and its variants—seed-tree, shelterwood, and patch cutting—in all federal forests. This bill requires federal agencies to preserve native biodiversity, all the existing plants and animals,

in their natural density in each stand of each forest they manage.

The bill authorizes citizen suits to enforce violations. It includes recovery of penalties and expenses. It applies to the US Forest Service, Bureau of Land Management, Fish and Wildlife Service, Bureau of Indian Affairs, and Armed Services.

These agencies would have to shift to selection management or stop logging. According to the bill, if they shift, they can produce just as much timber, but by an ecologically sound system. The 17 congressional findings in the bill include these:

2) Even-age logging reduces native biodiversity by encouraging a limited number of commercial species of trees on each site, generally only one; by suppressing competing species; and by planting, on numerous sites, a

commercial strain developed to reduce the diversity of genetic strains that previously occurred within the species on the same sites.

3) Even-age logging kills immobile species and the very young of mobile species and depletes the habitat of deep-forest species of animals, including endangered species.

13) Reduction of biological diversity in federal forests adversely affects critical ecosystem processes that moderate climate, govern nutrient cycles and soil conservation and production, control pests and diseases, and degrade wastes and pollutants.

Cosponsors of the bill are Michael Andrews (D-TX), Anthony Beilenson (D-CA), Sherwood Boehlert (R-NY), David Bonior (D-MI), William Dannemeyer (R-CA), Ronald Dellums (D-CA), Bernard Dwyer (D-NY), Peter Kostmayer (D-PA), William

Lipinski (D-IL), Norman Mineta (D-CA), Glenn Poshard (D-IL), Arthur Ravenel Jr. (R-SC), Arthur Rinaldo Jr. (R-NY), James Scheuer (D-NY), and Ted Weiss (D-NY). Among the Big 10 conservation groups, Friends of the Earth has endorsed the bill; National Audubon Society and The Wilderness Society have endorsed the concept.

#### BELOW-COST TIMBER SALES ACT

Senator Wyche Fowler (D-GA) and Representative Jim Jontz (D-IN) expect to introduce bills in May to phase out below-cost timber sales in five years. These bills include amendment of the KV Act, limiting allocations to a piece of the *net* instead of the *gross*.

—Edward C. Fritz

## Finger Lakes Wild!

POB 4542, Ithaca, NY 14852

Finger Lakes Wild! is a grassroots, biocentric environmental organization dedicated to the ecological restoration of central New York. Our goal is the preservation and restoration of wild areas throughout the Finger Lakes region. We are affiliated with PAW (Preserve Appalachian Wilderness), and we share with that group the vision of linking large areas of wild lands, which we call evolutionary preserves, into a wilderness network spread throughout the East. We get our name from the nine Finger Lakes which stretch, north to south, through this hilly region of NY. The lakes are the legacy of the last great glaciation, and the steeply cut gorges that empty into them are a unique natural feature of our area.

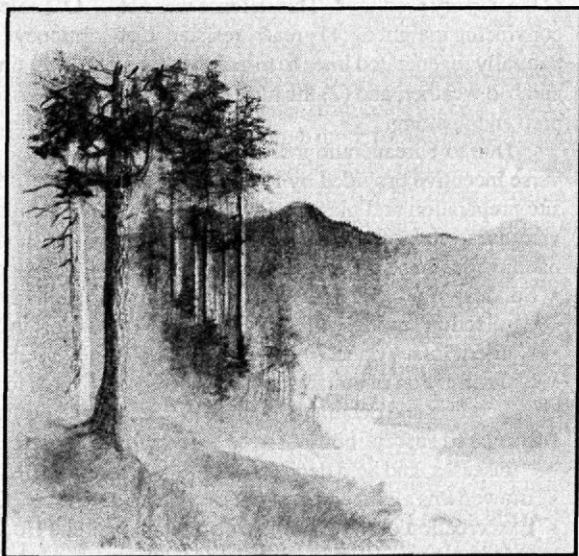
Because so much of the Finger Lakes region has already been degraded by roads, logging, agriculture, and other development, wilderness advocates here must think not only about preserving the few pockets of wild lands that remain, but also in terms of reclaiming lands that have been abused, and restoring to those lands the native species, both plants and animals, that belong there. For this reason, Finger Lakes Wild! is working on a variety of projects at several scales.

For example, we have begun discussions with the Cornell Plantations, a department of Cornell University in Ithaca, NY, about the possibility of collaborating on an ecological restoration project in the vicinity of the Cornell campus. This project would restore native

plants to a 70-acre "natural area" maintained by the Plantations. The area includes a wetland, a creek bed, a nearly pristine oak-hickory forest, and meadows with excellent representation of goldenrod species, mixed together with highly disturbed areas of invasive weedy vegetation and scarred landscapes typically found in urban environments. Our plan is to enlist community volunteers to clear trash, remove non-native vegetation, plant native vegetation, and monitor changes in the area. We hope to begin the project in September 1991.

At the other extreme, we have been examining the management practices employed in our local National Forest, Finger Lakes National Forest, to see how well they fit with our plan to restore wilderness to this area. The answer, as one might suspect, is not very well. Under the presently functioning Land and Resource Management Plan (LRMP), 93% of the land is being used for "resource extraction." Furthermore, it is crisscrossed with roads, grazing fences, and "management areas," which together have created an area composed of many artificial ecosystems, supporting certain qualities desired by humans. Therefore the forest does not exist as a whole for its own sake, on nature's terms.

If we are to restore wilderness to central New York, the Finger Lakes National Forest is our first and best chance. For this reason, we are challenging the LRMP. In early May, two members of our group filed the first-ever appeal of a timber sale on the Forest, and to our surprise and delight, the sale was almost immediately withdrawn. Of course, this is a small first step, but it gives us the hope we need to continue our fight to return this forest to its natural state. Our next step is to draw up our own plan for the future of this forest—road closures, land acquisitions and conservation easements, species reintroductions once suitable habitat exists—and then take steps to get our plan implemented. We shall accomplish this through our writings, lectures, and workshops.



Rob Leverett

We are engaged in other fights, as well—for the preservation of the last remaining wetland on the south shore of Cayuga Lake, for instance, and the preservation of a small wetland near Sapsucker Woods, home of the Cornell Lab of Ornithology. We are also “infiltrating” existing environmental groups, such as the Town of Ithaca Conservation Advisory Council. This group is in the process of writ-

ing Environmental Protection Overlay District legislation to protect sensitive areas such as steep slopes, wetlands, and stream corridors, so we’re bringing our biocentric message to the minds of those who influence environmental decision making. We’re also enlisting the aid of scientists at Cornell University, especially graduate students in ecology and landscape planning. And we’re making sure that we

get outside and hike—to watch the trees grow, listen to the birds sing, and remind ourselves of the great natural world that we’re working to preserve and restore.

You can contact us at the above address, or by calling Candace E. Cornell at (607) 257-6220.

—Rick Bonney

## Forest Guardians

616 Don Gaspar, Santa Fe, NM 87501

Forest Guardians is a membership group which began two years ago to protect the “forgotten forests” of the Southwest. We have assembled an action-oriented team of technical and legal experts to mount a broad and sustained challenge to planned Forest Service timber sales, grazing and mining activities in New Mexico and Arizona as well as help on the ground activists accomplish the same.

We focus primarily on wildlife, biodiversity and water quality issues. Forest Guardians has an excellent track record of successful administrative appeals and we have recently obtained the first court injunction halting timber sales in the Southwest. Our efforts are focused on three forests currently threatened by logging: the Kaibab Plateau north of the Grand Canyon in Arizona, the

Jemez Mountains on the western side of the Santa Fe National Forest in north-central New Mexico, and the Sacramento Mountains in south-central NM.

Forest Guardians is also playing a major role in the current battle over the southwestern population of the Northern Goshawk. This old-growth dependent raptor is the symbol of the Ponderosa Pine ecosystem which has been logged almost out of existence in the Southwest. Over 80% of the remaining fragmented goshawk habitat is now scheduled for logging.

Membership is \$15/year. Our newsletter is published quarterly.

—Sam Hitt

## Fossil Fuels Policy Action Institute / Alliance for a Paving Moratorium

POB 8558, Fredericksburg, VA 22404  
703-371-0222

The planet is being killed. Only a tiny, aware minority is really angry about it.

The evidence is in, whether from Lester Brown of Worldwatch Institute or James Hansen of NASA. In newspapers we read of the disappearance of frogs and toads around the world. We know that global warming will be extreme—unless greenhouse gases are cut 80% now. We know that ozone layer depletion could sever the food chain in the seas and curtail oxygen generation in the ocean.

The world has too many roads and too much blacktop. Strangely, this state of affairs has been low on environmentalists’ priorities.

The ancient Romans extended their empire via roads, only to have visited upon them the conquering barbarians—who used the same roads. The legendary Isle of Avalon disappeared due to draining of wetlands for farms and roads. From taming the wilderness to siting coal-fired power plants, roads have been the key to destroying our former universe.

Overpopulation is the root cause of these crises. From analyses of carrying capacity, the United States is overpopulated by a factor of two to ten, depending on how much energy would be used per capita to be “sustainable.” Most likely, the answer lies in the human population size on the continent prior to the invasion of the wasting race. There were approximately 10,000,000 Native Americans in the Lower 48 at the time of Columbus’s landing. There are nearly 250,000,000 humans here now.

The implications are sad: There are too many people to go back to the land and live right, even with “ecocities” and solar energy. The “shake out” of surplus humans will most likely occur with the shortage of petroleum (oil and natural gas) that looms on our 30 year horizon. A “mortality ambush” will hit the United States. The US is the most energy consumptive nation after Canada, both of which feed their populations via petroleum-based agriculture and food distribution.

Prior to 2000, new oil production will start taking more energy for extraction than the energy yielded. An energy profit ratio of less than 1:1 for oil will signify the end of American affluence. Other forms of energy, especially alcohol fuels and even solar photovoltaics, have poor energy profit ratios compared to the spectacular ratios for crude oil production in the 1950s. This is why there is no technological fix to continue any semblance of our wasteful society. The environmental movement, however, has not generally recognized this fact.

The need to halt growth—of US consumption and population—is another issue not recognized universally in the environmental movement.

In 1989, Fossil Fuels Policy Action Institute proposed a national paving moratorium on new roads and parking lots as an example of the kind of restructuring needed for a sustainable future. Readers of *Wild Earth* no doubt realize the damage that roads, paved and unpaved, do to the land and its inhabitants regardless of any vehicles. But it isn’t enough to defend big wilderness: Every road and every parking lot represents environmental decay with global effects—such as pushing people out into what was wilderness.

The key to stopping road-building and

*continued next page*

paving is forging a movement spearheaded by a diverse alliance. Such an alliance was started in 1990.

Currently, the Alliance for a Paving Moratorium consists of over 25 environmental and transit organizations coast to coast. At the offices of Fossil Fuels Policy Action, the small Alliance staff directs the fledgling campaign against new roads and parking lots in the US. The task is promising, as veteran freeway fighters and forest activists combine to support the first national road-fighting group. The Alliance needs you. There is no cost or obligation except to spread the word and circulate the paving moratorium petition.

Member organizations include Earth Island Institute, Sierra Club Appalachian Region, and the Biodiversity Legal Foundation. The Alliance's New-Road-Fighting Task Force is headed by Robert F. Mueller of Virginians for Wilderness.

With a small bureau in Argentina, the Alliance promotes pan-American biodiversity as well as cooperation in fighting global warming. The idea is that the US must change its land use patterns and restrict motor vehicle greenhouse gases in order to set a global example to save tropical rainforests.

The purposes of a paving moratorium are to save remaining wildlife habitat and halt the paving of farmland; stop suburban growth, and turn development efforts toward existing communities in need of revitalization; and install rail transit and bike and footpaths in place of new roads. A paving moratorium will restrict the spread of human population and force society to deal with the many forms of growth. The moratorium could lead to the overdue restructuring of our way of life as we revolutionize western civilization within ecological principles.

Few ideas embrace so many burning issues at once as the paving moratorium. Consensus issues, such as recycling and saving the rainforests, must be joined by the paving moratorium concept. To ensure success, social justice must be served, as urban minorities are enlisted to demand inner city redevelopment, and an end to white-flight bedroom-town development—possible only through new and wider roads.

Within a road moratorium movement, as many members as possible must reject owning cars, and support alternative transit while fighting the road-building juggernaut. The train is the most efficient mode of motorized

transport in terms of energy consumption, whereas jet travel is even worse than the automobile. Flying uses 5600 million British thermal units per passenger mile, car travel 4340 mmBtu, and Amtrak 3170, according to Oakridge National Labs.

The Alliance for a Paving Moratorium publishes a newsletter, *Paving Moratorium Update*, and offers petition forms for a paving moratorium. Write APM, c/o Fossil Fuels Policy Action Institute, POB 8558, Fredericksburg, VA 22404. Fossil Fuels Action is a nonprofit membership organization with 501(c)(3) IRS certification.

Jan Lundberg, APM Executive Director (former publisher of the *Lundberg Letter*, long considered "the bible of the oil industry")

References: *Beyond Oil: The Threat to Food and Fuel in the Coming Decades* (by Gever et. al. with the Complex Systems Research Center at UNH; Cambridge, MA, Ballinger Publishing Co, 1986), a project of Carrying Capacity, Inc., Washington, DC. An analysis of *Beyond Oil*, "The Oil Society Spins Its Wheels," from the Spring 1990 issue of *Population and Environment*, a Journal of Interdisciplinary Studies, is available from APM.

## Great Bear Foundation

POB 2699, Missoula, MT 59806

The world's wild bears are in trouble. Of eight species around the world, three—the Sun Bear of south Asia, the Spectacled Bear of South America, and the beloved Giant Panda of China—seem almost inevitably headed for extinction. The primary threat to these and other bears is a growing human population that is unraveling the large-landscape wildernesses that have provided wild bears with the habitat they need. Beyond that generic threat lies a plethora of others ranging from poaching to a declining ozone shield.

Because so many threats exist for bears, and the opportunities for coexistence of our species and theirs are increasingly tenuous, bear conservation is a multi-layered enterprise that requires the efforts of a wide variety of environmental organizations. The Great Bear Foundation (GBF) is one.

GBF was founded in 1982 with meager financial resources and with the Grizzly Bear as its top priority. Our first act was to file written comment on government plans to lease

critical Grizzly habitat in Montana for oil exploration. Now in our tenth year, we are still up to our elbows in the controversies over energy. In a recent issue of our publication, *Bear News*, we criticized the "national security" rationale for proposed oil drilling in the Rockies and the Arctic National Wildlife Refuge.

GBF started publishing *Bear News* in 1983. Its scope is international. Anything that can affect the well-being of any bear anywhere is fair game for *Bear News*. The readership is also international—GBF has members in over half a dozen countries. Some issues are devoted to special topics—bears in a changing global climate, bears in a changing global economy, the bears of Canada and Alaska, etc.

In 1984, with public lands management monitoring programs well established, GBF began an education initiative. We started giving books about Grizzly Bears to rural families and libraries throughout Grizzly country, on the assumption that the more people know about Grizzlies, the better the chance for peaceful coexistence. With grants from individuals and the Wildlife Preservation Trust Interna-

tional, we donated 100 books to individuals and libraries throughout the Glacier National Park/Bob Marshall Wilderness Ecosystem.

In 1985, GBF started a fourth program to clear the way to human/bear coexistence. We began reimbursing ranchers for livestock killed by Grizzlies on Montana's Rocky Mountain Front, the last place in the United States where wild Grizzlies still have access to the spacious high plains landscape of the Old West. We established this program despite a long and well-known history of conflict between ranchers and Grizzlies because the current generation of ranchers along the wild Rocky Mountain Front is largely amenable to coexistence with the bears. Although few environmentalists know it, the spacious ranchlands along the Front are as critical to the Grizzly's future as the nearby mountain wilderness. The ranchers' willingness to share that space is one reason Grizzly Bear numbers enjoyed a small increase in the 1970s and 80s. One rancher told me this about Grizzlies: "Bring 'em on. I like 'em." No two ranchers think exactly alike about bears or anything else ... but the trend in recent years is away from conflict and toward coexistence.

By 1985, we were also making small grants to grassroots groups doing good work in bear country. GBF grant monies totaling \$101,000 to the Science Museum of Minne-

sota will enable a traveling bear exhibit which debuts in Yellowstone National Park this year. Depending on available funds, we intend to continue giving grants to groups and individuals working effectively for bear conservation.

GBF also serves as an information clearinghouse. We share information with biologists responsible for designing bear conservation programs in Asia and South America; ranchers along Montana's Rocky Mountain Front; selected media, and environmentalists and scientists.

The diversity of GBF efforts may make it seem like a big outfit. It isn't. All programs are run on the strength of GBF's 1 1/2 person staff and an annual operating budget that has rarely exceeded \$65,000. Despite severe limits on staff time and funds, GBF has managed to fit in special projects such as a recent petitioning of the US Fish and Wildlife Service to list the Whitebark Pine, a tree species important to Grizzly Bears, as a Threatened/Endangered species.

Effective conservation of the world's wild

bears demands wilderness preservation and a variety of other steps that will require the best efforts of many organizations. Unfortunately, most of the largest organizations involved in bear conservation maintain political rather than biological agendas which sometimes puts them at cross-purposes with wild bears' need for wilderness. This fact further complicates the already formidable challenge of protecting the world's wild bears.

—Lance Olsen

## Great Old Broads for Wilderness

POB 368, Cedar City, UT 84721  
801-586-1671

"The elderly ... have almost no means of entering (Wilderness) ..." said Senator Orin Hatch (R-UT) in a recent anti-Wilderness diatribe. Well, here are some "elderly" women anxious to take some time from their busy lives to dispel this insulting, condescending attitude about the "elderly" and the out-of-doors.

Great Old Broads for Wilderness (do not use the acronym!) was founded on the proposition that everyone is, will be, or would like to be, a woman 45 years of age or older who participates in Wilderness use and enjoyment. Anyone can join, if he or she will cheerfully

declare in public that he or she is a woman 45 years of age or older who loves Wilderness.

The organization promotes protection and proper use of public lands and undeveloped areas. Great Old Broads will conduct and promote scientific research of Wilderness and make the findings available to the public.

This bunch of crusty, but dignified Great Old Broads uses and loves Wilderness and will testify to that in Congress, in the courts, or wherever it'll do the most good. Members from across the country use facts, humor, and personal experience to turn on its ear the notion that, because we're old and female, we're city-bound



dependents. Our name, and the fun we have, notwithstanding, we are a serious group—Wilderness preservation is a serious business.

Please contact Susan Tixier, President, at the above address for further information. There are no dues or fees for joining this fine organization, but T-shirts with our marvelous logo on them are available for \$12 apiece.

## Greater Ecosystem Alliance

POB 2813, Bellingham, WA 98227

Given the enormous disparity between the present situation and any semblance of ecological sustainability, contentment with actions for single species, special places, or aesthetic opportunities compares to the lure of Nero's fiddle. The activist's responsibility is to boldly exclaim new standards for conservation. Science affirms intuition in outlining what these standards should be.

Biodiversity is best protected with a focus on large functional ecosystems. This is especially so in temperate regions, where natural and anthropogenic climate change could pull the environmental rug from under isolated communities. Greater Ecosystem Alliance sees a fleeting opportunity to apply this strategy in the Pacific Northwest.

We define a *greater ecosystem* as a land area sufficiently large and intact to sustain all native species and ecological processes. Sustaining all native species implies sufficient habitat to support viable populations of large raptors and reclusive wide-ranging mammals. Ecological processes—disturbance regimes, watershed and nutrient cycling, species interrelationships, evolution, etc.—are the wellspring of biodiversity, the endless dance of life.

Even without massive restoration efforts, several Northwest greater ecosystems may still be conserved. GEA focuses on the North Cascades, Selkirk, Central Cascades and Olympic ecosystems. The first two are bisected by the British Columbia/Washington border, necessitating international efforts.



One might ask how a small organization (two staff, 300 members) intends to establish a viable reserve system of such monumental scale? To this I confidently respond, "I don't know." We do, however, have some ideas.

Our general approach covers several interfaces: between grassroots and professional, science and advocacy, long-term vision and immediate battles. Basically, we use conservation biology to guide our concerns and do everything we can.

We are presently working on two books, one on conserving the Greater North Cascades Ecosystem (GNCE) and the other on Grizzly

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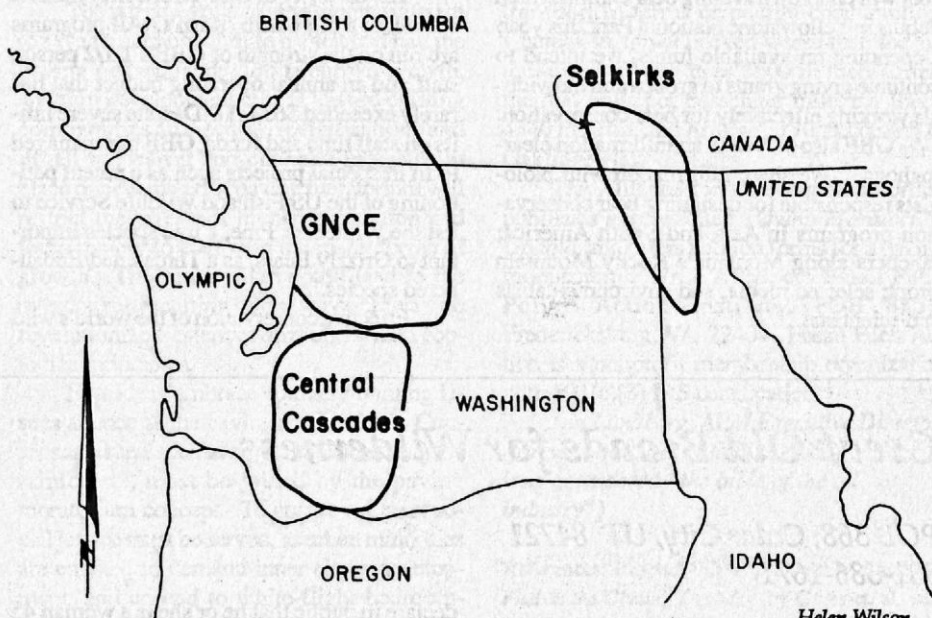


Bears in this vast wild area. In June, we'll host our seventh quarterly public seminar. This one focuses on Gray Wolf recovery in Washington. In October, we'll offer a three-day conference in Seattle on conserving the GNCE.

We are working with recreational fishers to oppose various salmonid hatchery projects, with Native Americans to protect fisheries and forests, with BC groups to integrate US and Canadian conservation goals, and with regional and national organizations to save ancient (and non-ancient) forests. Part of the last includes mapping legislative proposals for a bold and scientifically-informed forest reserve system for public lands.

We have petitioned the US Fish and Wildlife Service (FWS) to implement strong measures to protect Grizzly Bears and their habitat in the North Cascades, and will likely drag the agency into court this summer. We are preparing to petition FWS to list and protect the Canadian Lynx as an Endangered species in the US, and demand habitat protection in the "Meadows," a 200,000 acre complex of high elevation Lodgepole Pine forest in north-central Washington with the densest (yet meager) Lynx population in the lower 48. Our 1990 appeal of the Mt. Baker-Snoqualmie National Forest plan—based primarily on biodiversity arguments—is still pending.

GEA last year organized a ten week Ancient Forest Rescue Expedition, which traveled 42 states with The Big One, a giant Douglas-fir log on a semi-truck, hyping the gospel of protection for the world's greatest temperate forests. We're trying to broaden the forest issue to more than big trees and owls in several ways, including congressional lobbying and production of a brochure on biodiversity and Northwest forests. Our newest project will



Helen Wilson

utilize volunteers for field work to ascertain trends in amphibian populations on National Forests.

While our work to date has focused on the GNCE, we intend to add emphasis on the other ecosystems soon. Indeed, the latest research indicates that a viable population of Grizzlies would require as much as 40 million acres of habitat. Only an extensive regional reserve network could accomplish this.

GEA is now raising funds to hire an experienced conservation biologist who, over the next two years, will work with grassroots activists and other information sources to delineate greater ecosystem boundaries, ascertain key biodiversity threats, and propose reserves and conservation strategies for the Selkirks,

Olympics, and Central Cascades.

From this effort will arise an informed proposal for a regional biodiversity protection network, including connecting corridors (likely incorporating the Black Hills and Okanogan Highlands of Washington and the Monashee Mountains of southern BC), for the wildlands of Washington and southern British Columbia. When this is integrated with the network proposed by the Alliance for the Wild Rockies, a plan will emerge to guide conservation efforts for much of the Northwest.

Membership dues are \$15, and entitle one to GEA's quarterly, *Northwest Conservation: News and Priorities*. Donations are accepted with feigned ambivalence.

—Mitch Friedman

## GreenFire Project

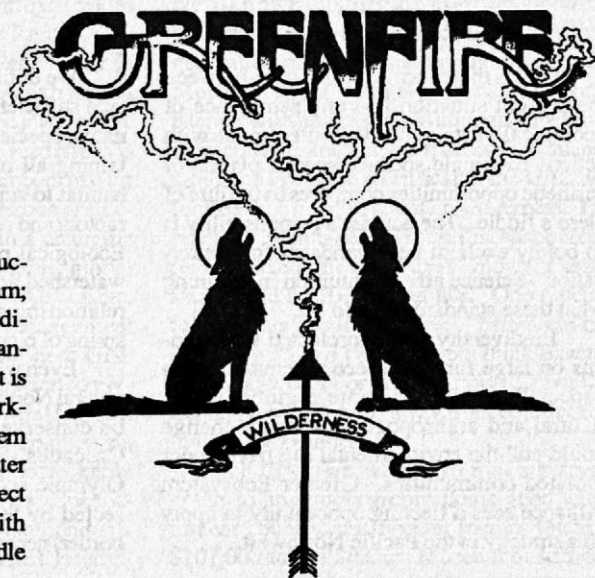
Box DB, Bisbee, AZ 85603  
213-865-8707

The GreenFire Project is one of the new groups springing from the Earth First! movement. The GreenFire Project continues the work of Roger Featherstone and others with grassroots groups to preserve wilderness.

The GreenFire Project is primarily educational. The Project produces nationwide tours to educate the public about wilderness conservation, and provides technical and networking assistance to local groups.

The GreenFire Project is currently work-

ing with groups to stop the destruction under way on Mount Graham; providing outreach for the Biodiversity Legal Foundation; and planning a fall 1991 tour. The Project is examining the possibilities of working on a Greater Smokies Ecosystem similar to the concept of the Greater Yellowstone Ecosystem. The Project plans to work most closely with conservationists in the broad middle



belt of the country, from Ohio through the Dakotas and south to the Gulf. Contact us if you wish to help in any of these areas.

The GreenFire Project will conduct an introductory, *Out of the Ashes* tour, beginning in mid-September, 1991. Starting in the Southwest, the show will travel clockwise around

the country, finishing in mid-November.

As with previous GreenFire tours (under EF! as the Green Fire Tours), the performances will feature music, visuals, and segments on wilderness groups and their strategies. By the time you read this, Roger will have prepared publicity materials and chosen a musician to

accompany him. The show is in the concept stage and your input is welcome.

If you would like to host an *Out of the Ashes* show, please contact Roger soon. Preliminary booking has begun.

Contact GreenFire Project for more information. Donations are gratefully accepted.

## Headwaters

POB 729, Ashland OR 97520  
503-482-4459

Headwaters was founded in 1974 to focus citizen resistance on the forestry practices of the Bureau of Land Management (BLM), including clearcutting, slash and burn, and herbicide spraying. From its start as a neighborhood association, Headwaters has grown into a nationally-acclaimed forest-advocacy organization. In 1988, Headwaters was named "Conservation Organization of the Year" by the Oregon Natural Resources Council for being "extremely effective within agency planning processes, in the courts, and with public education."

Headwaters consists of dedicated activists, researchers, forestry experts, legal professionals and a gifted staff. Our office in downtown Ashland serves as a local forest data repository with extensive files, reference materials, maps and photos.

Since hiring a staff attorney in 1986, the organization's reputation in forestry research and law has blossomed. The research wing was organized in response to the lack of agency data on Oregon forests, and the low credibility of information that did exist. Headwaters research findings have been requested for use by the Agricultural Committee of the US House of Representatives.

Over the years, Headwaters has established solid working relationships with many national organizations such as The Wilderness Society, National Wildlife Federation, National Audubon Society, Natural Resources Defense Council, and Sierra Club Legal Defense Fund. Further, Headwaters serves as a big-sister organization to more than twenty grassroots groups in Southwest Oregon, helping them organize their neighborhoods for agency planning processes.

The overall mission of Headwaters is to protect the biological diversity of natural forest ecosystems; promote sustainable, environmentally-conscious forestry practices in the United States; and promote economic alter-

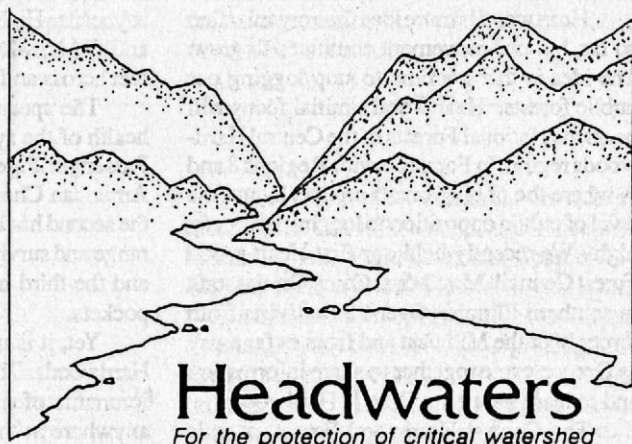
natives in timber-dependent regions. Pursuant to this mission, our primary goal is to establish a national model for forest management reform.

The primary focus of Headwaters direct action is the three million acres of public forests in our home territory, Southwest Oregon. This territory falls within the Siskiyou/Klamath Bioregion, home of the most biologically diverse temperate forests in the world. The watersheds that comprise this territory are the Rogue, Applegate, Illinois, Chetco, and Elk Rivers. The BLM (Medford District) and Forest Service (Siskiyou National Forest) manage much of this territory.

We feel that four specific aspects of our work have brought Headwaters to prominence in the Northwest environmental movement:

**Emphasis on Sustainable Forestry:** We address forest issues not only from a broad ecosystem preservation perspective, but also from the very site-specific perspective of sustainable forestry. We scrutinize on-the-ground results and agency data regarding reforestation problems, timberland suitability, alternatives to clearcutting, alternatives to herbicides, and the effects of slash-burning. Given the checkerboard ownership typical of BLM forest lands, where preservation alone is not a feasible strategy, we focus on reforming forest practices and putting an end to twenty years of overcutting.

**Grassroots Strength:** Watershed groups in alliance with the Headwaters coalition have capitalized on our professional expertise to achieve precedent-setting results. For example, Friends of the Greensprings has successfully negotiated with BLM over timber



sales along the Pacific Crest Trail by the proposed Soda Mountain Wilderness and is currently mapping reforestation failures.

**Regional Cooperation:** We actively support conservation groups outside Southwest Oregon to reform regional forest policies. Headwaters Board member Chris Bratt is also on the Board of Northwest Coalition for Alternatives to Pesticides (NCAP). This relationship helps important herbicide-reform work, such as forcing the Forest Service to comply with the landmark "Mediated Agreement" on use of herbicides to control "competing" vegetation on tree farms.

**Communication with the National Groups:** Finally, collaboration with the national environmental groups has blossomed in the past three years in the context of the old-growth protection campaign and litigation. Our staff attorney, Chuck Levin, was instrumental in laying the groundwork for the Spotted Owl lawsuit against BLM, and served as regional representative to the Ancient Forest Alliance. We have participated in National Audubon's Adopt-A-Forest Mapping Project.

Overall, these four factors point to one of the special roles Headwaters plays in the Ancient Forest Campaign: to bridge the information gap from the local watersheds (where the damage is being done) to the state level (where the immediate control of Oregon's forests is concentrated), and to Washington, DC—where the fate of the nation's forests will be determined.

—Julie Norman

## Heartwood

Rt.3 Box 402, Paoli, IN 47454  
812-723-2430

### HEARTLAND + HARDWOOD = HEARTWOOD

Heartwood is more idea than organization so far, but our movement continues to grow. The idea is that it's time to stop logging our public forests. Heartwood's initial focus will be on the National Forests of the Central Hardwoods region, in Forest Service Regions 8 and 9, where the public forests are small, and the level of public opposition to logging is already high. We recently held our first Heartwood Forest Council, May 3-5, at Camp On-dessonk in southern Illinois. Over 250 activists from throughout the Midwest and from as far away as Oregon came together to share information and to learn about the Central Hardwoods.

The Central Hardwood Forest extends roughly from the Appalachians to the Great Plains, and from southern Minnesota to northern Mississippi. This region is considered the most productive hardwood growing area on Earth. The forest was once a near continuous living blanket cloaking the hills and river bottoms of the Ohio and upper Mississippi River Valleys with more than 70 species of huge hardwood trees, and an interdependent network of life forms from the topsoil to the tree tops.

The mighty forest is now little more than a fragmented patchwork of its former diverse glory. Vast bottomland hardwood swamps have been cleared and drained for corn and soybeans. High ground grows cities, highways and fields, where it once grew oak trees ten feet across and a hundred feet high.

The species that best reflect the current health of the system as a whole might be the Passenger Pigeon, the Wood Bison, and the American Chestnut tree. The first is extinct, the second has been eliminated from its former range and survives elsewhere only as a hybrid, and the third barely clings to life in isolated pockets.

Yet, it is not too late to save the Central Hardwoods. Though only a few postage stamp remnants of native virgin forest still stand anywhere in the region, the soil remains fertile and the trees are coming back. Major elements of the original forest are demonstrating remarkable resiliency, though others, such as the neotropical migrant songbirds, are in pronounced decline.

What is the solution? For starters, *leave the public forests alone.*

Few people realize that all the public forests of the Central Hardwoods combined represent less than 3% of the total acreage of the

region and only about 10% of the land now growing trees. Ninety percent of the region's timber lands are privately owned, mostly by farmers and other individuals with relatively small holdings.

Moreover, the private lands are currently growing far more timber than is being harvested. More land is growing trees as formerly marginal cropland is taken out of cultivation, and more timber volume is growing now than at any time since the clearing of the great forest.

Thus, in the Central Hardwoods, there is no need for any further logging on public lands. Biologically diverse native forest is scarce throughout the region. Only the public forest contains sufficient acreage to allow the native forest an opportunity to heal itself. So far, public forests have been clearcut, poisoned, roaded, and strip-mined. They've been managed intensively for timber and game, with here and there a segment set aside for scenery or recreation.

For too long we in the conservation movement have found ourselves having to justify protecting these few small areas, with the debate over logging limited to which variant of clearcutting to use. Heartwood's role in the short run will be to broaden the terms of the debate to question the very legitimacy of logging, forcing those who would log our public forests to bear the burden of proof. We believe that if the public knew what is being done to the public forests in their "interest" and at their expense, the logging would stop.

—Andy Mahler

## Native Forest Council

POB 2171, Eugene, OR 97402  
503-688-2600

The Native Forest Council (NFC) is a national non-profit, grassroots organization that dedicates all of its resources to the native and ancient forest crisis. It was started by Tim Hermach of Eugene, Oregon, in 1988 and incorporated by a group of business, academic and professional people who believe that current forest practices do not make environmental or economic sense. Their case is supported by well-known citizens, including David Brower, Executive Director of the Sierra Club for many years; Huey Johnson, founder of the Trust for Public Lands; and Dr. Carl Sagen, who serves on NFC's advisory board. The Council is funded by donations, subscription fees, and grants.

Prior to forming the Council, Tim

Hermach had been elected to the executive committee of the local chapter of the Sierra Club, hoping to be able to work to save what remained of the Northwest's old-growth forests. Frustrated by what he calls the Club's "willingness to compromise away the forests at any cost," Hermach broke from the Club to form the Native Forest Council and help draft a bill, the Native Forest Protection Act (NFPA). The Council's goal, as represented in the bill, is the preservation of all remaining native forest on public lands in the United States, and establishment of ecologically sustainable and restorative forestry where logging has previously occurred.

A native forest is any natural, original forest that has never been logged or has been naturally regenerated. Only 5% of this country's native forest remains. Most is on

federal land in the Northwest, and very little is protected.

Unlike many environmental organizations, the NFC uses economic arguments. As taxpayers we subsidize the timber industry with over \$2 billion a year. The US Forest Service has a budget of \$2.5-3.5 billion a year, and returns less than \$400 million to the US Treasury.

The timber industry would not be destroyed by banning logging on all native forests on all federal lands, as NFPA would do. As soon as all remaining native forests are saved, a sustainable and profitable timber industry could be developed on private lands. Seventy-two percent of US timber lands are privately owned.

The Native Forest Protection Act would redirect the \$2.1 billion Forest Service deficit to employ or retrain dislocated timber workers in restoration ecology and ecosystem restoration. NFPA would change the direction for the Forest Service to one of rehabilitation and restoration. The bill bans all forms of clearcutting, in favor of more labor-intensive,

individual selection logging. It takes far more jobs to restore a forest than destroy it: planting of diverse native species to reestablish biodiversity, revegetation of roads, enhancement of native fish stocks, selection logging and removal of federal tree farms ...

Another problem NFPA addresses is that the economies of many Northwest communities are built upon liquidating their nearby public forest, because the schools and counties receive a portion of timber receipts. This system is unfair. Some children in the North-

west get nothing from timber sales for education and some get as much as \$5000 a pupil. NFPA proposes that the government pay annual "in lieu of property tax" payments, as it now pays in 45 states, based on the value and amount of federal property in each state. With this bill, Northwest schools would be more equitably funded.

Education is a big part of the Native Forest Council's work. NFC's publication, *Forest Voice*, combines text, visuals and graphics depicting the devastation of public lands. The

NFC office serves as a center for compilation and dissemination of data on forest issues, and has a small library open to concerned citizens. NFC is developing a national media campaign to inform the public about what is happening to their lands. The Council works with other public interest groups, including Greenpeace, various Audubon and Sierra Club chapters, the Greater Ecosystems Alliance, Save America's Forests, AFSEEE, and over 100 other organizations representing nearly 4 million members.

—Jody Suhanek

## Natural Areas Association

Room B, 620 South Third St., Rockford, IL 61104

Started in 1979 by a group of professional natural areas researchers and managers in the Midwest, the Natural Areas Association has become an international organization which advances the preservation of natural diversity. Its major goal is to inform, unite, and support persons engaged in identifying, protecting, managing and studying natural areas and biological diversity, whether as professionals or as volunteers.

The diverse membership represents federal, state, and local governments, environmental organizations, academe, and private land management professionals. The Association is governed by a fifteen member Board of Directors elected by members.

The Natural Areas Association publishes the peer-reviewed *Natural Areas Journal*, quarterly. Each issue contains articles relat-

ing to research or management of natural areas, parks, rare species, land preservation and theoretical approaches to natural areas work. Book reviews, interviews, Steward's Circle (shorter communications), and State Reports are also often included in the *Natural Areas Journal*. Occasionally, special topic issues are published. Past topic issues have addressed exotic alien species, old-growth forests, rare plant inventory and monitoring, habitat fragmentation, Longleaf Pine-Wiregrass Ecosystem, and Great Lakes coastal ecosystems, among others. Some back issues are still available. Contact Natural Areas Association for information (address above). Other inquiries concerning the *Natural Areas Journal* should be sent to the Editor, Eric S. Menges, Archbold Biological Station, POB 2057, Lake Placid, Florida 33852.

The Association conducts an annual conference. The 1991 annual conference will be held in Estes Park, Colorado, October 15-18. The topic will be "Natural Areas in the Western Landscape," with sessions to discuss riparian restoration, livestock grazing and natural diversity, ecology of exotic species establishment, the Colorado Natural Areas program, and rare plant management.

The Natural Areas Association is initiating a series of regional management workshops. The first will be held in Champaign, Illinois on August 7-8, and will focus on the increasing problem of deer damage to natural areas due to growing deer population numbers. Topics to be covered include monitoring deer damage and deer populations, techniques of controlling deer numbers in natural areas, and dealing with the public, government agencies, and special interest groups on this topic.

Membership is open to anyone interested in the issues, events, ideas and opportunities shaping the natural areas movement. Individual membership costs \$25. Student, institution and library memberships also are available.

## Preserve Appalachian Wilderness

81 Middle St, Lancaster, NH 03584  
603-788-2918

Preserve Appalachian Wilderness, PAW, brings Eastern biocentric activists into contact with each other and trains them to be effective in their areas. We distribute information and offer consultation on actions, appeals, lawsuits, and legislation. We link activists with biologists, lawyers, writers, and other experts. PAW Network has recently become incorporated

and is seeking tax-exempt status as a citizens group and public interest law firm.

The *PAW Network Journal* provides information and ammunition for PAW activists. This bimonthly draws from the numerous regional publications in the PAW Network, including the *Glacial Erratic*, PAW's evolu-

tionary journal of the Northern Appalachians (write for sample copies).

PAW activists know their forests, watersheds, and estuaries. They unravel the intricate webs of bureaucratic misinformation and lies. They testify at public hearings. They prepare

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comments, lawsuits and appeals. They collaborate with others to implement effective legislation to preserve native biodiversity, natural processes, and evolutionary integrity. When all else fails, they halt the destruction of the environment with their bodies.

Current PAW projects include critiques of the Northern Forest Lands Study, task forces on every National Forest in the East, Eastern estuaries and wetlands monitoring, regional wilderness proposals throughout the Appalachian Mountains, legal work in opposition to the lampricide program in the Lake Champlain watershed, and appeals of the proposed Loon Mountain ski area expansion (see Cindy Hill's articles). PAW activists also work with the Biodiversity Legal Foundation.

—Buck Young

#### AN ONGOING PAW CAMPAIGN:

##### The Northern Forest Lands Study — Stepping Stone to The North Woods Evolutionary Preserve

The Northern Forest lands of New England and New York are, outside of the Green and White Mountain National Forests and Adirondack Park, primarily privately owned. While the southern reaches of the region are characterized by small land-holdings including family farms and woodlots, the vast northern reaches are mostly industrial forest controlled by timber barons and international paper conglomerates. Clearcutting and recutting have left an impoverished ecosystem and a long list of endangered and extirpated species. However, the surprising regenerative powers of this relatively moist region, and the paucity of development other than timber cutting in most of northern New England and New York, offer hope for habitat restoration and reintroduction of extirpated species.

International economic chaos has led the paper companies to pursue a course of liquidation—clearcutting their holdings for quick monetary gain, without considering the future of the land. The companies are not motivated by concern for long-term commercial viability of the forests of the Northeast; they can grow trees faster in the Southeast and overseas.

It appears that the paper companies, which have been increasingly subject to corporate mergers and buy-outs, are trying to consolidate to the point of operating a few mega-mills worldwide. The future of the industry may be illustrated by the mill built in Japan in 1981 and floated around the world to the Amazon Basin where it was fastened to great pilings and set to work on rain forest pulp. If need be, when the Amazon pulp is gone, they can pick it up and float it somewhere else.

Anticipating drastic changes across the entire Northeast as the paper companies finish liquidating and pull out, Congress directed the US Forest Service in 1988 to study the present situation and document likely impacts. A Governors' Task Force was created to conduct the Northern Forest Lands Study (NFLS), accept public input, and formulate a vision for the Northern Forest Lands.

The area delineated for study by the Task Force includes roughly 26 million acres of fragmented forest across Maine, New Hampshire, Vermont and upstate New York. Omitted from the study area were privately held school lands, such as the large tracts owned by Dartmouth College, and some other private lands. These omissions may have been consistent with Congress's intent to study the

future of paper company holdings, but they are inconsistent with the NFLS's overall task of plotting a vision for the forest lands of the Northeast. Defined from an ecosystems approach, the Northern Forest Lands stretch from the Berkshires in western Massachusetts north into Canada, and from the Finger Lakes in western New York to the Atlantic shore.

The Study led to creation of a Northern Forest Lands Council, which recently established an office in Concord, New Hampshire, and hired staff. The Council is charged with shaping the data and public input gained through the Study into a working vision for the Northern Forest Lands. The range of options open to the Council is broad, including promotion of federal purchases and regulatory schemes. Their work presents a unique opportunity to view the North Woods from an evolutionary perspective.

Unfortunately, the Council appears to be dominated by members with vested commercial interests in the North Woods. Coordinated pressure from wilderness advocates is crucial to the fate of the forests. The Northern Forest Lands Alliance, a loose coalition of local and national environmental organizations, has been working to make the Council more responsive to local and environmental concerns.

In addition to instigating the NFLS, Congress instituted the Forest Legacy Program, an appropriations section of the New Farm Bill, which funds an experimental purchase program of woodlands in the Northeast. Congress seems to have implied that the program be used at least in part for the purchase of easements as a means to protect land; however, Program administrators seem intent



Patrick Dengate

on using easements in the least effective manner. Rather than targeting small woodlot owners in areas subject to development pressure, Forest Legacy Program funds are likely to be doled out to large industrial landowners currently feeling little development pressure, thereby granting another taxpayer subsidy to the megalithic paper industry. [An example of unwise use of easement purchases is the proposed Lake Umbagog National Wildlife Refuge in Maine, where the federal and state governments plan to buy the development rights of much of the land around Lake Umbagog, while leaving ownership in the hands of timber companies who can continue to harvest timber—at a cost to taxpayers almost as great as the purchase price of the lands would be. See Spring 1991 *Glacial Erratic*.]

The expenditures of the Forest Legacy Program, together with other projects in the region based on easement purchases rather than true conservation measures (like full-fee acquisition), could largely determine the fate of the Northern Forest Lands. Paper industry subsidies, planning efforts that fail to include ecological considerations, and continued mainstream environmental community acquiescence may nail the lid on the paperboard coffin of the Northeast.

Preserve Appalachian Wilderness aims to prevent this outcome. PAW monitors the NFLS, testifies at hearings, publicizes threats to the Northern Forests through its quarterly *Glacial Erratic*, lobbies, presents legal challenges, and otherwise endeavors to realize a better vision: a 30 million acre Northern Forest Evolutionary Preserve. Please write if you'd like to help.

—Cindy Hill

# Public Lands Action Network

POB 5631, Santa Fe, NM 87502  
505-984-2718

Decades of abusive grazing practices have severely degraded Western lands, dried up streams, caused massive erosion, and virtually eliminated the Gray Wolf, Grizzly, Jaguar, and many other species from the West. The Bureau of Land Management (BLM) says two-thirds of the rangeland it manages is in "unsatisfactory" condition. The Forest Service and BLM subsidize this country's 27,000 public land livestock operators by allowing them to graze sheep and cows on over 14% of the continental United States for only \$1.97 per cow per month, even though these operators provide only 3% of the nation's red meat. Unbelievable and intolerable.

When New Mexico public lands activist Jim Fish founded Public Lands Action Network in 1988, he envisioned an informal network bringing together the dedicated individuals scattered around the country who were working to protect public lands from livestock overgrazing, and who shared the sentiment that grazing had caused more damage to Western ecosystems than all other impacts combined. In April 1990, Fish and Arizonans Steve Johnson and Leslie Glustrom organized the first ever national meeting of public land grazing activists.

That meeting, held in Albuquerque, New Mexico, was a resounding success. Most of the principal activists working on public lands ranching attended. In an excellent and unusual example of coalition-building, these activists came together to form a national organization focused exclusively on the public lands grazing issue. An empty conservation niche was filled.

Our goals are to provide a central source of information, support and training to regional activists; to systematically address the impacts of public lands livestock operations; to define policies for protection and restoration of native ecosystems; and to encourage broad public participation in the management of our public lands. PLAN's Board of Directors includes Jane Crosby of the Committee on Idaho's High Desert; Tom Dougherty, Central Rocky Mountain Regional Executive for the National Wildlife Federation; Jane Leeson, Utah Representative for The Wilderness Society; Tom Noble; and prolific writer and photographer George Wuerthner.

In the year since its founding, PLAN has

generated considerable publicity. PLANers Katherine Bueler, Ron Mitchell and Jim Fish have published two newsletters (available on request). The organization was covered in *Sierra* and *US News and World Report* magazines. Leslie Glustrom has published *Participating in Grazing Decisions on Your National Forest: A Citizen Handbook* (available from PLAN for \$8 or whatever one can pay). Johanna Wald of Natural Resources Defense Council, Rose Strickland of the Sierra Club, Joe Feller of Arizona State University, and Ken Rait of Southern Utah Wilderness Alliance are creating a BLM grazing policy handbook. It was sponsored by PLAN and other environmental groups, and will be available soon. Lynn Jacobs of the Grazing Task Force is writing *The Waste of the West*, an authoritative book following up his widely-distributed tabloid, *Free Our Public Lands!*, published a few years ago. [It is due out late this year. Write the Grazing Task Force, POB 5784, Tucson, AZ 85703, for information.]

As our primary goal is to provide a central clearinghouse on grazing issues, we have opened an office in Santa Fe, NM. This year, PLAN will expand publication of its quarterly newsletter, now called *GrassRoots*. In it, we cover news from the legal, legislative and agency fronts; the efforts of cattlemen, sheepmen and Sagebrush Rebellion types; ecological and scientific background on the issues; and effective strategies for activists. *GrassRoots* also provides access to resources: the handbooks mentioned above, a grazing bibliography, a photo library with grazing-related pictures, and more. PLAN is your gateway to becoming involved in the Adopt-an-Allotment program, and helping us publicize case histories of areas and wildlife damaged by overgrazing.

Concern about public lands overgrazing is growing nationwide. A proposal to end public land ranching subsidies swept through the US House of Representatives last fall [see Legislative Corner]. The media is paying increasing attention to livestock on public lands. *USA Weekend's* 21 April 1991 cover story was "Earth Day Roundup: Are Cowboys Killing the West?" (31.6 million circulation). On April 28, ABC Evening News had a segment on grazing in the West. The spot featured PLAN Executive Director Steve Johnson, our second

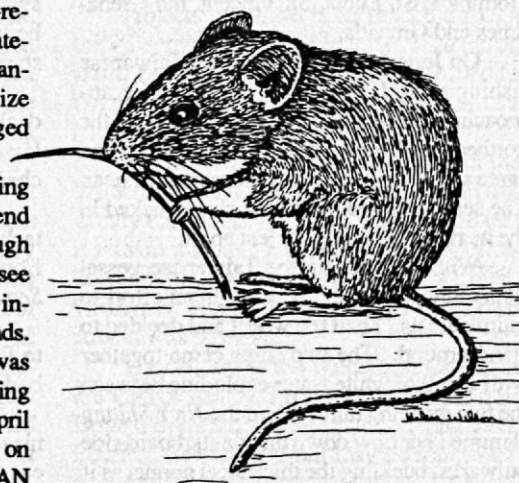
annual meeting in Tucson, and our ground tour of the healthy ungrazed Buenos Aires National Wildlife Refuge and adjacent areas destroyed by grazing.

When livestock grazing began in the West over a century ago, it represented a decision made by only a few people. PLAN believes that the decision to continue such grazing on public lands should be a public decision, openly debated by all Americans, not just the two percent of all US ranchers who hold federal grazing permits.

Today we know that a decision to introduce any large exotic animal into any habitat is also a decision to eliminate native species of both plants and animals, for there are no empty niches in nature. Once the plant resources are severely reduced, as is the case today on most of the 300 million acres of our Western public lands, the entire life-support capacity of the land is severely reduced. Land that cannot support its original wild inhabitants cannot long support humans either.

A tree farm is not a forest; likewise, pastures and feedlots are not rangelands. PLAN needs more members to financially support its work, but also to prove to the world that many people truly care about the fate of our rangelands. Members receive four newsletters a year and action alerts. When you contact us, please tell us of any other groups or individuals you think we should contact. Thanks for your support.

—Katherine Bueler, PLAN Coordinator



## Save America's Forests

4 Library Court SE, Washington, DC 20003

202-544-9219

*ed. note: Save America's Forests plans to have a longer report for our next issue; but we'll run a brief report here, so that readers will know how to join what is becoming the DC umbrella group for grassroots forest defenders. The following is adapted from a recent Save America's Forests action alert.*

Save America's Forests is a coalition of over 75 groups representing 225,000 people. We have an office on Capitol Hill, only 2 blocks from Congress. We have rented a

building with room to expand and become a center for forest activists.

The Save America's Forests Coalition has a vision for a new ethic in US forest management. We are unified in our opposition to clearcutting (even-age management). We are unified in our desire to protect all virgin and native forest ecosystems nationwide, and we want our damaged ecosystems restored to native diversity. This vision is expressed in our nationwide forest protection proposal, the Native Forest Protection Act (NFPA).

Part of our work involves organizing



meetings between potential congressional sponsors of such bills as NFPA and groups of Coalition members. We also hold strategy planning meetings, Lobby Weeks, and other public events.

## Sea Shepherd Conservation Society

Canada: POB 48446, Vancouver, BC V7X 1A2

USA: POB 7000S, Redondo Beach, CA 90277

*ed. note: We all know what Sea Shepherd does.... So rather than recapitulating Sea Shepherd's many successful campaigns on behalf of ocean wildlife, we give here the Captain's report en route to a confrontation with the Japanese or Taiwanese drift-net fleet.*

Port of Spain, Trinidad & Tobago, 9 June 1991: We left Key West, Florida on May 28. Our course took us along the southern Cuban coast, then along the north coasts of Haiti and the Dominican Republic and Puerto Rico. Rounding the Virgin Islands, we headed south along the eastern side of the islands of Dominica, St. Lucia, St. Vincent, the Grenadines and Grenada.

On June 6, we encountered a Taiwanese fishing vessel, the *Jin Y Shiang*. We approached to investigate. The vessel fled to the northeast. We pursued and soon caught up and came along their port side to inspect their gear. The seas were rough and the ships bucked in the heavy swells only 20 feet apart.

Without warning the Taiwanese vessel swerved toward us, obviously in an effort to intimidate us. I had the wheel and decided to stand ground. The two ships came together with a wall of white water exploding between the two grinding hulls. Then the *Jin Y Shiang* slammed her bow down on our starboard side bulwarks, buckling the thick steel gunnel as if it were cardboard. We pulled away to avoid

further damage as the Taiwanese cheered.

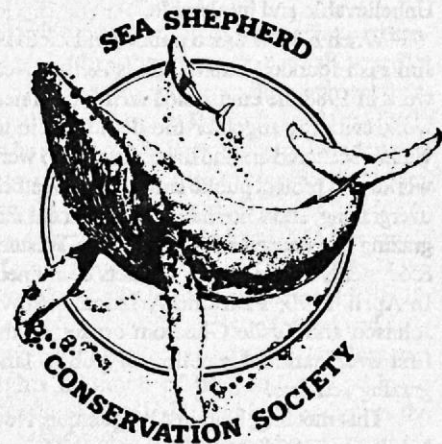
Falling back, the *Sea Shepherd II* maneuvered to come about along the starboard side of the drift-netter. Again the Taiwanese swerved into us. This time, we were prepared. Our wheel was put hard to starboard and we quickly fell back. As the Taiwanese ship swung into us, she missed our side with her bow. Instead, she swung about so that her starboard side slammed into our bow.

We crushed her rails, and crumpled her deck, our bow smashing through into the galley area. This time, the *Sea Shepherd* crew cheered.

The Taiwanese drew first blood by attacking us first. However, after taking a hit from them and returning a hit of our own, the *Sea Shepherd II* had caused the most damage.

We let the drift-netter go and carried on to Port of Spain. We need to find the main body of the fleet.

From Trinidad & Tobago, we have organized an aerial reconnaissance of the waters east of here. We have also contacted Sid Johnson, the most vocal opponent of drift-net



fishing in Trinidad. Sid's photographs of drift-net vessels in Port of Spain in 1990 were published in the *New York Times* and were the first indication of Taiwanese and Japanese drift-net operations in the Atlantic.

On June 10, the *Sea Shepherd II* will leave Port of Spain for the position of 5 degrees north, 45 degrees west. This is the area some 300 miles off the coast of Brazil where the fresh nutrient rich waters of the Amazon mingle with the waters of the Atlantic. It is a rich fishing area. This fact, along with information from various reliable sources and from Port of Spain dockside scuttlebutt, leads me to believe that there we will make contact.

All the signs are good. An hour after our encounter with the drift-netter, we were blessed by a rainbow and a pod of over 80 Spotted Dolphins. We had not seen a dolphin for the week prior to the encounter.

—Captain Paul Watson

## Virginians for Wilderness

Route 1, Box 250, Staunton, VA 24401

Virginians for Wilderness is a grassroots group devoted to furthering the cause of wild lands in Virginia, West Virginia and throughout the Central Appalachians. Our goal is to make the Appalachians live again, to reform them as wholly connected ecosystems in which native biodiversity is reestablished and the evolutionary process is unimpeded. In this we hope to be practical visionaries, using conservation biology and the other sciences as well as the arts to educate and organize the public, building a social and political basis for the ecological restructuring and restoration that must come if we are to save the planet.

At present we are concentrating our efforts on (1) documenting Central Appalachian ecosystems, (2) monitoring Forest Service timber sales and other activities, (3) working toward an ecologically-oriented forest plan for the George Washington National Forest, (4) working with and within the Alliance for a Paving Moratorium documenting impacts of highways and highway construction. Part of this activity entails our proposal for a Wilderness/Corridor system for the George Wash-

ington and hopefully for the Jefferson and Monongahela National Forests as well. Our Wilderness/Corridor system has been adopted by the GWNF planners as one of 13 alternative Forest Plans (it's number 3 at present). Our alternative is the only one capable of giving adequate protection to an assemblage of rare, endemic and disjunct species (Cow Knob Salamander, Shenandoah Millipede, Drooping Bluegrass, Paper Birch, Red Crossbill, etc.) that grace Shenandoah Mountain and our originally-proposed 65,000 acre Shenandoah Wilderness. It would protect and link together with broad corridors a string of potential new wilderness areas in the rich floral province of the eastern Blue Ridge. It would halt existing abuses such as clearcutting and road-building. Many roads would be closed permanently, riparian zones would be protected, and broad corridors of developing old growth would tie together the Forest and link it to the Jefferson and the Monongahela.

Readers can write letters to support our Wilderness/Corridor system as the future management plan for the GWNF. Send to:

George Kelley, Supervisor, George Washington National Forest, POB 233, Harrisonburg, VA 22801.

Readers can also send us money (checks payable to Virginians for Wilderness) to support our activists such as Crickett Hammond (forest monitor and bureaucrat gadfly), Ernie Reed (newsletter editor and forest panel member), Mike Jones (forest monitor and ecological publicist extraordinaire) and others.

—Bob Mueller



Jackie Taylor

## The Wilderness Covenant

POB 5217, Tucson, AZ 85703  
602-743-9524

In 1989, a small group of activists devoted to the preservation of the natural environment realized the need for a non-profit tax deductible organization whose purpose was to seek and provide funding for individuals and groups committed to grassroots environmentalism.

THE WILDERNESS COVENANT was incorporated as a non-profit foundation in 1990. Its primary purpose is to further the preservation of the natural environment through publication of information, educational programs, and grassroots environmental efforts that lie within the law.

Currently, the Wilderness Covenant is a 501 (c) (3) organization which solicits funds from both public and private sources. These funds may be sought by individuals or grassroots groups whose guidelines comply

with the purposes of the Wilderness Covenant, through which their grants may be solicited and administered for a small fee not to exceed 5%. This fee is intended only to cover the actual costs of administering any grant that passes through the Covenant.

Individuals or groups who seek grants or funding to be administered by the Wilderness Covenant must first submit a preliminary proposal to the Covenant for review. This proposal must include a succinct statement of purpose, the proposed budget, the anticipated time span the project will require for completion, the name of the project director, and a statement concerning the degree of anticipated lobbying. Full responsibility for the project will be assumed by the project director. Covenant directors will review the proposal and

notify the applicant if permission is granted for the applicant to solicit funding under the Covenant umbrella.

Projects that have been funded through the Wilderness Covenant include: *Wild Earth*, *Wildlife Damage Review*, *The Colorado Grizzly Bear Project*, and *The Sierra Madre Network*.

It is not the intent of the founders of the Wilderness Covenant that it become an unwieldy bureaucracy. Rather, it is intended that it remain a simple straightforward organization committed to serving the needs of the environment with as little emphasis on its own structure as possible.

The officers of the Wilderness Covenant are Clarke Abbey, President and Treasurer; Dave Foreman, Vice-president; and Jack Loeffler, Secretary. Mail may be sent to the above address.

—Clarke Abbey & Jack Loeffler



# Wildlife Damage Review

POB 2541, Tucson, AZ 85702-2541  
(602) 882-4218



The Animal Damage Control (ADC) is a federal program under the direction of the United States Department of Agriculture's Animal and Plant Health Inspection Service. Funded with taxpayer dollars, their budget for 1990 was 30 million dollars with an additional 15 million dollars in state donations. Its mission, according to the 1931 ADC Act, is to provide "the best methods of eradication, suppression, or bringing under control on national forests and other areas of the public domain ... or privately owned lands, of mountain lions, wolves, coyotes, bobcats, prairie dogs, gophers, ground squirrels, jack rabbits, and other animals injurious to agriculture ... and to conduct campaigns for the destruction or control of such animals ..." ADC exists now, as it did then, as a subsidy to the livestock industry, and occasionally as a tool for wildlife management agencies. The ADC Annual Reports show that the total cost of control exceeds the value of the reported livestock loss. These archaic policies and procedures are inhumane, environmentally destructive, and economically unsound.

Our group, the Wildlife Damage Review (WDR), has decided it is time to alert the public about Animal Damage Control activities. Because ADC often operates clandestinely, most of the public is unaware of its existence. Three months ago we received a grant from Patagonia, Inc. to coordinate a nationwide campaign to bring ADC actions under public scrutiny.

The goal of the Wildlife Damage Review is to eliminate the Animal Damage Control Program as it currently operates. There may be times when control of wildlife is necessary; for example, to protect an endangered species. Therefore, we would like to see a new agency within the Department of the Interior, whose focus is on wild lands and native animals, as opposed to the Department of Agriculture, whose emphasis is on crops and livestock. This will only come about with new legislation. We'd like to see an advisory board formed, consisting of wildlife biologists, legislators, and citizens knowledgeable of ADC's function. This board would create a bill, to be presented to citizens and Congress, that gives preference to the preservation of the biotic community over the economic interests of the ranching and livestock industries. Time is of the essence, and we are concerned that legis-

lative changes occur as quickly as possible.

This goal will not be attained easily. The livestock industry, which keeps the ADC Program alive, has one of the most powerful lobbying forces in the West. Much groundwork must be done before legislative change can take place. The public in general must be educated as to the existence of ADC and its function, expenditures, and methods of wildlife control. Many grassroots and larger groups are already working on these issues with great persistence.

In order to bring ADC to the public eye, the Wildlife Damage Review has been challenging Environmental Assessments that are being written for the purpose of supporting the ADC's wildlife control activities on Forest Service lands. In an effort to get the public involved, we have participated in radio, newspaper, and magazine interviews. Additionally, we are sending out newsletters and activist packets. We serve as a central clearinghouse for information on ADC. We give referrals to individuals needing legal or scientific expertise, as well as give moral support. We are learning what is necessary to bring public and legal attention to the ADC's Animal Damage Management practices. With the hard work of many groups and individuals, we believe that the final goal, legislative change, will occur.

Several grassroots efforts are working on the ADC issue. Tom Skeeel of Predator Project (POB 6733, Bozeman, MT 59771) has

been involved for several years and has a wealth of information and ideas for activists. Another group has formed in New Mexico, spearheaded by Pat Wolff and Katherine Bueller (Pat Wolff, 1026 Don Cubero, Santa Fe, NM 87501). Such regional groups are essential in scrutinizing local and state-wide ADC plans before they are implemented.

The Wildlife Damage Review's current available funding will end on September 1. Therefore we are dependent on individual contributions and will welcome help soliciting funds from foundations, private groups, etc. Money will be received through a 501c-3 filed receiver (tax deductible, non-profit): Wilderness Covenant, POB 5217, Tucson, AZ 85703.

—Nancy Zierenberg & Clarke Abbey



# Ancient Forests: The Perpetual Crisis

by Mitch Friedman

*"But now ... it seems something is about to give. For better or for worse, ancient forest legislation will happen soon."*

*—from a well-intentioned article printed in Earth First! Journal, May 1, 1989; author unknown*

Summarizing the history and status of the Northwest forest issue is like preparing a short course in neurology. But who remembers details anyhow? I have it on good authority that 1991 is definitely the year for ancient forest legislation. Here we go again.

What keeps the ante high, and clammy congressional feet to the forest protection flames, has been litigation. As I write (late April), the U.S. Fish and Wildlife Service (FWS) is a few days from presenting Judge Zilly with delineations of Northern Spotted Owl critical habitat, ordered by him some weeks ago. Speculation is that the maps may withdraw up to 11 million acres from the timber base. Timber wives will then have 60 days to sob at public hearings.

Judge Dwyer has ruled that the Forest Service, by tossing out their own voluminous but vacuous owl plan and declaring they would manage in a way "not inconsistent with the recommendations of the Interagency Scientific Committee on the Spotted Owl" (the heralded Jack Ward Thomas report), left itself without a plan and in violation of the National Forest Management Act. Dwyer even commented that the Thomas report may be insufficient. Next week he'll hear testimony on a motion for sweeping timber sale injunctions.

The BLM is being sued for not performing section 7 consultations with FWS under the Endangered Species Act for impacts of timber sales on Spotted Owls. The BLM manages much of the low-elevation old-growth in western Oregon.

Wheels go round and round in D.C., too. In the House of Representatives, the Ancient Forest Protection Act (HR 842) was introduced

again this year by Jim Jontz of Indiana. This bill carries the often-tacit support of the major environmental groups. Bruce Vento, of Minnesota, who chairs the public lands subcommittee in the House, has reintroduced his Ancient Forest Act (HR 1590), with improvements just slight enough to cause the Sierra Club to salivate, dart their eyes around, and look for a quiet moment to slip into a smoke-filled room. The Club's commitment to AFPA was bolstered recently when Jontz publicly dressed down Club lobbyist Jim Blomquist. [Jontz scolded Blomquist for not attending important AFPA strategy meetings and showing mixed signals about the Club's support for the bill. Reportedly, Blomquist was embarrassed enough that he spent the next day phoning apologies around the country.]

Vento's committee is holding hearings on the issue today—as I write—with panels from several sides: labor, industry, agency, conservation. What balance. Carrying the ball for our side are such titans as Blomquist and George Frampton, Executive Director of The Wilderness Society. (Seems to me we've heard from them before.)

Those not being heard are activists from eastern Washington and Oregon, where abused forests are being totally neglected by Congress. Also left out are Native Americans with vital cultural interests at stake in this issue; fishers now concerned with salmonid declines from loss of spawning habitat and stream siltation; and even some small loggers and mill owners, mavericks in their own right, who wholeheartedly support forest protection and have valuable insights and ideas for economic buffers.

## New Conservation Movement

The industry has drafted a bill, with predictable contents, which hasn't been introduced. Also not introduced is the Native Forest Protection Act. However, Texas Representative John Bryant has introduced the bold "Forest Biodiversity and Clearcut Prohibition Act, HR 1969, a modified version of a bill introduced last year. The reason this bill foundered last year (and probably will this) are the *heuvos pequena* of the national environmental groups [they lack the courage—ed.]. While National Audubon Society (NAS) and National Wildlife Federation (NWF) have applauded politely, TWS is silent and the Sierra Club refused support outright. Imagine that.

One might sense that this correspondent has taken on a cynical attitude. But all is not gloom. The above was mere introduction, and the remainder of this report will focus on positive and refreshing developments on this complex issue. These developments have broad implications for what Dave Foreman calls the "new conservation movement."

### FRUITS OF TENACITY

One week last September, I ran into many friends and allies: Lou Gold, Doug Norlen, Tim Hermach, Tony Van Gessel, Paula Swedeen, Bonnie Phillips-Howard, John Talberth, many more. Was this an EF! rendezvous? No, it was a crucial week in Washington, DC. How things have changed!

The model for conservation politics through the 1970s and 1980s was this: Grassroots mobilizes around an issue which nationals won't touch; grassroots gets beaten to hell by agencies and media; nationals come in to gain members off controversy; nationals take over; nationals cut deal in DC without grassroots input.

The ancient forest issue followed that model from Bald Mountain in 1983 to the conference in Portland, called by The Wilderness Society in 1988, wherein was formed the Ancient Forest Alliance—the loose-knit coalition in which nationals accept grassroots input in Forest Service fashion. Then came national media, Sierra Club Legal Defense Fund (not affiliated with the Club) and Jim Jontz.

*continued next page*

Everything was going as usual ... except the grassroots never let go.

Many factors contributed: the particularly ornery and well-seasoned cut of this gang; the assertiveness of Oregon Natural Resources Council, still quasi-grassroots; and the courage of NAS, which invested its money in empowering and mobilizing grassroots through Adopt-a-Forest committees. NWF has also been supportive where their structure allows.

Through countless power struggles, most of which the entrenched and distant DC lobbyists won, the grassroots hung on. That tenacity has paid off. For instance, when the Club and TWS wanted to help move Vento's bill out of committee, all hell broke loose within the Ancient Forest Alliance and the bill died.

This past winter, a group of foundations met to consider how best to fund ancient forest protection. They concluded, among other things, that the grassroots needs their own office in Washington, DC. (Save America's Forests, formed last year with similar intentions, serves nationwide forest issues not specific to the Northwest.) They appointed four grassroots/regional leaders to bring them a funding proposal, from which the Western Ancient Forest Campaign was born.

Still awaiting funding for many of its programs, including activist travel to DC and a Northwest coordinator, the Campaign's capitol office is now open and staffed by Jim Owen of California. We're not yet to the happy

ending. George Frampton lobbied foundations to not contribute a dime, as the nationals defend their turf. Even if fully funded, the Campaign is in a precarious position between manipulative nationals and distant and volatile grassroots. While I wish Jim Owen the best (and anxiously await a plane ticket), I don't envy his position.

### BIG IS BETTER THAN SMALL

How has grassroots activism benefitted the forests? National lobbyists think in terms of political reality and quiet sacrifice; grassroots exclaim ecological imperatives to the grave.

A few years ago, these lobbyists were instructing their ranks to draw tight lines on maps around small groves of big trees. Our response—that the issue is about perpetuating ecosystems, including stands young and old, beasts scaled and feathered—was countered with lectures on political “ripeness” and striking while the iron is hot.

We never drew those tight lines, and today one can hear “biodiversity” echo down the marbled halls. Some members of Congress even know what that means. Others will soon.

In 1989, I raised thanks to the coming of the lawyers. Now I shall hail the coming of eminent landscape ecologist and activist Reed Noss. After years of inability to move activists to draw tight lines, NAS contracted Reed

to guide the effort of rendering a proposal for a Northwest forest reserve system.

Noss's contract includes workshops for activists, literature reviews and guidance papers, and map work. Several drafts of reserve maps are now emerging, encompassing far more than large trees. Reserves include full ranges of seral stages and forest types, entire watersheds and rare communities, roadless lands and low elevation forest.

Proposed reserves are based on fundamental landscape ecology principles of large size and connectivity. Extensive restoration is called for in many areas. We're asking for our land back.

As I sit here, glancing at the Mt. Baker-Snoqualmie National Forest reserve proposal on the corner table and considering Reed Noss, seated between Frampton and Blomquist before Congress 4000 miles away, the changes in conservation during just my brief (6-year) tenure are evident. In structure, in goal and in action we see a revitalized movement responsive no longer to the whims of power, but to the health of the Earth.

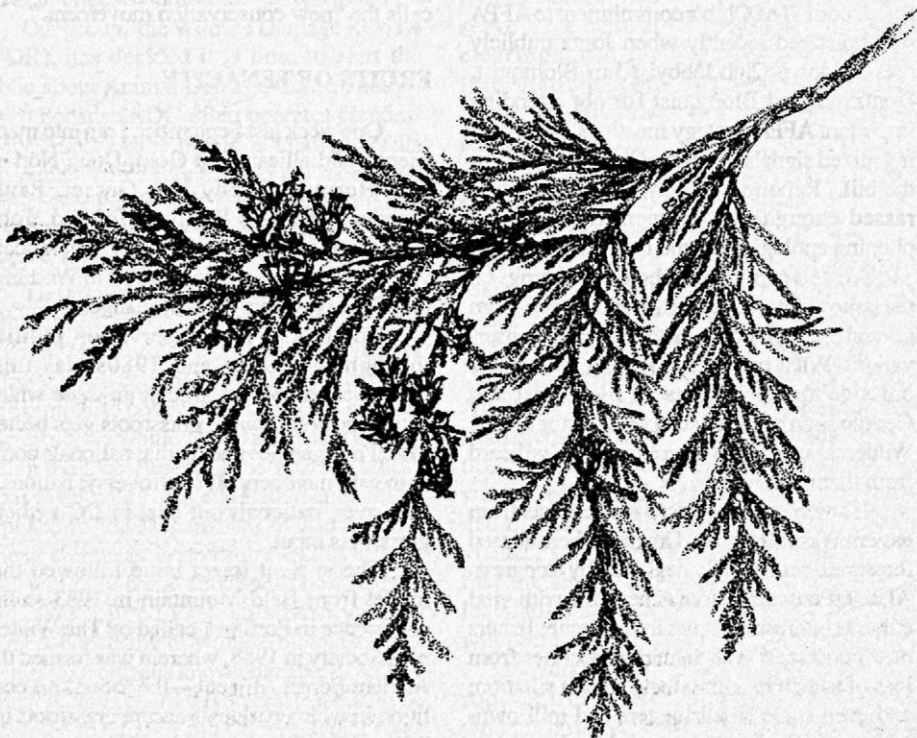
### LATE-BREAKING NEWS

On May 6, FWS proposed designation of some 11.6 million acres of private and public lands as Northern Spotted Owl critical habitat. Entire timber towns shut down to encourage large and boisterous logger turnouts at public hearings on the issue. On May 23, Judge Dwyer ruled with conservationists and enjoined about 80% of planned Forest Service timber sales in Spotted Owl habitat. His decision reads like a page from *Wild Earth*, and has raised the fury of the Northwest Congressional delegations. Hold onto your seats.

Also on May 23, Representative Jerry Huckaby (D-LA) introduced a bill for the timber industry, which is best described as the Stump Production Act of 1991. This bill would be inconsequential were it not for cosponsorship by several Northwest democrats (AuCoin, Swift, Dicks). The bill was also introduced in the Senate.

Vento seems to have been impressed recently by three things: testimony at his hearings, the amount of proposed FWS critical habitat, and the Dwyer decision. He is presently meeting with Jontz to come up with a better bill. As I write this postscript, dangerous hearings are occurring in the House Agriculture subcommittee chaired by Harold Volkmer (D-MO). Very unbalanced panels are convincing a very unbalanced Volkmer of the need for large open spaces in the woods.

*Mitch Friedman is the President of*

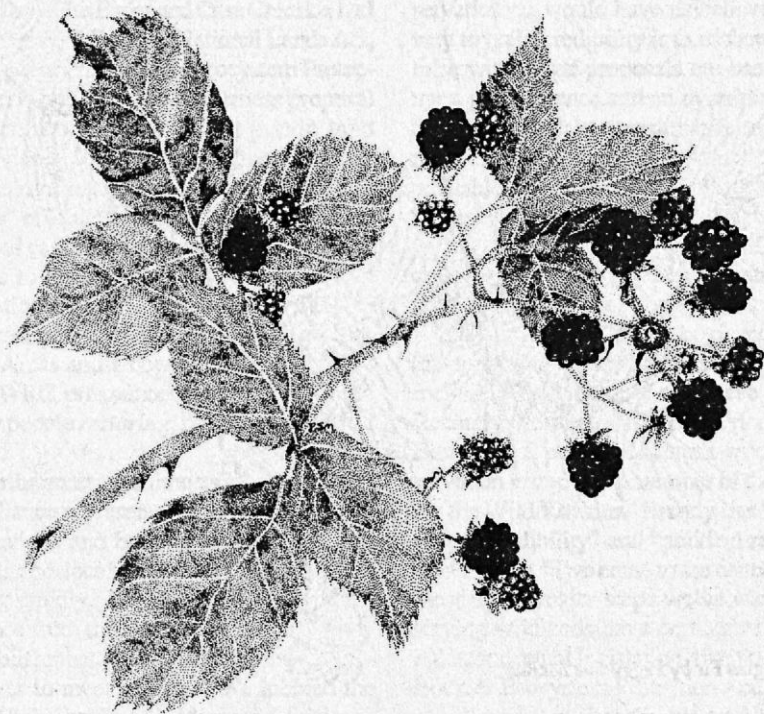


Western Red Cedar by Peggy Sue McRae

the Greater Ecosystem Alliance. See GEA's group report this issue.

Western Ancient Forest Campaign can be reached by contacting Jim Owen, 1400 16th NW, Washington, DC 20036-2266; 202-939-3324.

The ancient forest campaign will likely be the subject of debate in Congress as you read this. Congresspersons need to hear from their forest-loving constituents. As you write your senators (US Senate, Washington, DC 20510) and representative (House of Representatives, DC 20515), keep in mind that the strongest proposed forest legislation is the Native Forest Protection Act (NFPA), which needs sponsors. NFPA would protect all native forests on federal lands in this country. Bryant's Forest Biodiversity and Clearcut Prohibition Act is also considered strong by conservationists, and it has been introduced. Jontz's Ancient Forest Protection Act (AFPA) is much stronger than Vento's Ancient Forest Act. Many conservationists support NFPA, AFPA, and the Bryant bill—they are compatible—and oppose Vento's bill.



Blackberry by Peggy Sue McRae

# The Wild Rockies:

## Paradise at the Crossroads (or, Fear and Loathing on Capitol Hill)

by Howie Wolke

The jungle air was steamy, and sickly gray-brown haze hung like a pall of death over the sprawling mass of decadence and decay.

Five primates strolled through the jungle canyon. They ascended a gentle slope flanked by giant walls of rock. They stopped and huddled together, emitting a variety of guttural noises, apparently communicating some profound mammalian truth. Then they quickly returned to formation—three abreast in front, two abreast behind—and continued the journey.

Suddenly, a medium-sized male pointed to a slab of stone and uttered something in an

odd sounding tongue. The others sounded a chorus of agreement ... and the five Montanans on a lobbying junket for wilderness made a bee line for the Everett Dirksen Senate Office Building, Capitol Hill, Washington, DC. It was October 1990 in the political jungle.

I was among those primates. But before we look at that solicitous sojourn, let's back up a bit, say, to early 1984. Then occurred an incident in the annals of the conservation movement that should pass from obscurity to infamy, because otherwise, the movement risks repeating the folly.

In 1984, I lived in Jackson Hole, Wyoming, and I wanted to help save the Idaho wilderness. Idaho, that is, not Iowa. My Grandma, bless her 87 year old heart, used to reminisce about driving through Idaho in her younger days. Trouble is, her travels were between Colorado and the folks back in New

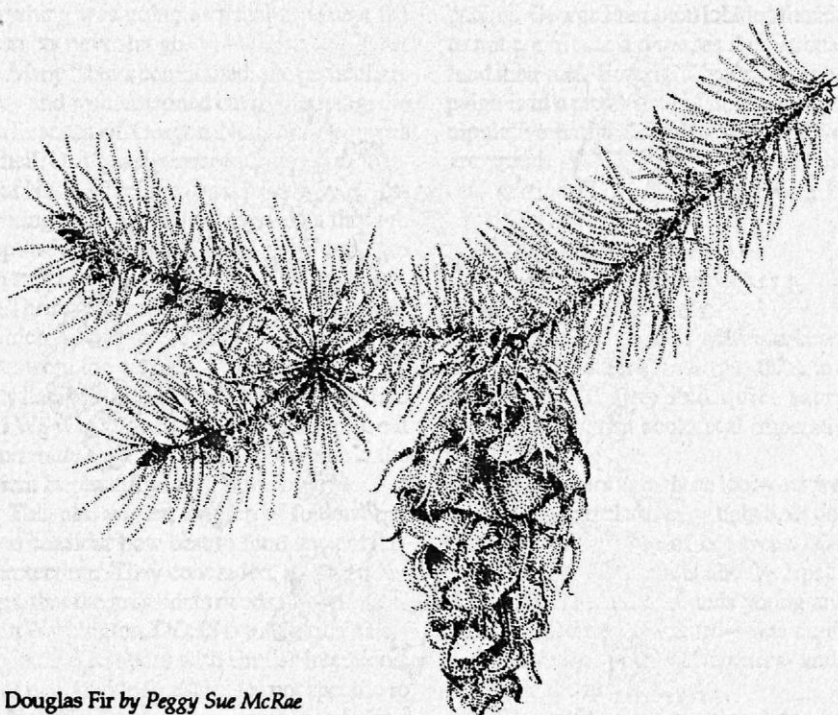
## New Conservation Movement

York. A detour through Idaho would have represented poor trip planning. Only when I considered the geography of the situation, and only after she'd mentioned the corn fields, did it hit me that she meant Iowa, not Idaho. Idaho is potatoes, not corn. More important, though, Idaho is wilderness.

More of Idaho is roadless and wild than any other state except Alaska. Almost wholly within Idaho is temperate America's biggest official Wilderness, the 2.3 million acre Frank Church River of No Return Wilderness (RNR). Idaho is mostly mountains, forests, wild river canyons, and living deserts. Idaho's National Forests include 9 million acres of unprotected threatened *de facto* wilderness, more than any other state except Alaska. Forget the spuds. The real America—the American wilderness—still persists in Idaho, and I wanted to save it all.

However, outfits like the Idaho Wildlands Defense Council, the Sierra Club, and the The Wilderness Society only proposed to save some of Idaho's threatened wilderness—about 3.5 million of the 9 million contested National

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Douglas Fir by Peggy Sue McRae

Forest acres. Most of their proposal consisted of rugged scenic peaks and ridges, high basins and rocky slopes. In other words, it was a classic recreation-oriented proposal for scenic but ecologically limited rock and ice wilderness.

Idaho's US senators at the time, Jim McClure and Steve Symms, both anti-wilderness zealots, wanted even fewer rocks protected. Representative Larry Craig (now a senator, having replaced McClure, who recently retired) had seriously proposed that a new highway be blasted across the state along the main Salmon River, through the heart of the RNR Wilderness. Symms once encouraged local loggers to hoe up a population of an endangered plant that was delaying a Clearwater National Forest timber sale. And McClure once bragged, "We shoot spotted owls at our border." (Unlike Oregon and Washington, Idaho has no known Spotted Owl populations.) Such is Idaho politics: a bunch of suited primates grappling for the ultimate in ecological ignorance.

So in retrospect, I could almost forgive the moderate groups for their puny proposal. Compared to McClure, Symms and Craig, they looked like visionaries.

Some of us, though, simply couldn't bear to bestow nearly all of the best remaining low and mid elevation country to the loggers. Rocks and ice are nice, but biodiversity is nicer. What needed (and still needs) protection were virgin forests, meadows, bogs, marshes, rivers, floodplains and grasslands; yet, few in the movement were defending these rich

habitats. So I got together with Carole.

Carole King writes and sings a mean tune. When not recording in L.A. or some other goddessforsaken bastion of smoggy incontinence, she lives on the upper Salmon River near Stanley, Idaho. And she loves wilderness.

We met at her place on the Salmon on a snowy day in February 1984. With us were Dr. Bruce Hayse, Sarah Sturges, and Carole's then husband, Rick Sorensen. We agreed on the need to up the ante. We wanted Congress to protect all 9 million threatened acres. A 9 million acre bill in the hopper would make the Sierra Club types look like the moderates they were; thus, pressure for them to compromise would be lessened. We believed that some of the neglected wildlands could be saved, particularly if we could mobilize grassroots support. We agreed that it was foolish for wildland proponents to partake in a protracted political struggle with a compromise position in hand, open for all to see.

Bruce and I spent days poring over and drawing lines on maps, ravaging our files, phoning local activists, and building the proposal. A staff member of Representative John Seiberling's House Public Lands Subcommittee began to work our maps and figures into a bill. Perhaps most important, Carole and Rick took our proposal to the political jungle and found a Congressman who would introduce our bill. Carole lined up 15 co-sponsors, too. We were happy, hopeful hominids.

Unfortunately, we soon met resistance from an unexpected quarter: the Sierra Club; yes, the same outfit founded in 1892 by wil-

derness visionary John Muir. Their Washington lobbyists felt that *they* knew what was best for Idaho, and in their view the best we could expect was a few chunks of rock and ice wilderness. To propose more would threaten their "credibility" with politicians who abhorred political risk. Over the years I've seen many similar situations in which wilderness lobbyists and spokespersons refused to promote wilderness as it ought to be: ecologically viable, big; including the low country and biological corridors as well as the peaks; the mesas and floodplains as well as the narrow canyons; with thriving populations of native species. But such a vision represents a dramatic departure from the traditional parameters of the debate; and dramatic departures risk credibility. So goes the thinking.

What derailed us in 1984 was this: Sierra Club lobbyists Tim Mahony and James Blumquist got to our man in Congress and had him can the bill. I don't know who else they lobbied, but nobody in Congress would go out on an environmental limb that the Sierra Club wouldn't at least tacitly support. After an ugly meeting with Blomquist and Mahony that deteriorated into a shouting match pitting the two professional lobbyists against Carole and Rick, the two Idahoans went home frustrated and angry. Our bill was dead.

Today, looking back on the fiasco, Carole puts it this way: "We were prepared to fight the development interests; we had no idea that we'd be called upon to fight those who were supposed to be on our side."

I do not pretend to know what motivates others. I've imbibed more than a beer or two with Mahony and I think he really does care. But the corrupting influence of power cannot be overstated, and nowhere is there more power than in Washington. It works like this: You take one of these large hominids, specifically a *Homo sapiens*, and you send him/her to Washington. Trim the hair, add spectacles, a digital watch, maybe a ring or two and a silly looking suit. Give this clothed ape a briefcase full of documents, an office, and a title (that's the clincher) and pretty soon the domesticated primate starts to feel important. The final corruption occurs when s/he mingles with all of the other suited apes of Capitol Hill: senators, representatives and their ilk. S/he forgets that s/he is just a goddamned ape in a suit.

You get immersed in the game; you have lunch with a senator, cut a deal with a representative, see your name in the paper or your face on the tube. The memory of the real world—the wilderness—dims. It becomes easy to compromise away wild places of dim recall when you live and work in a world that reduces all debates to compromise.

Cynics might charge that some people become environmental professionals for reasons other than a deep love of wild places and wild life. We don't all, I suppose, wilt and falter in the absence of the great bear, the big wood, the pelting hailstorm. Security, the "excitement" of politics (yucch!), and potential career advances to bureaucracies and even the corporate world certainly are factors that figure in policy decisions of many environmental professionals.

Whatever the motives, though, there is an inescapable bottom line: Each wilderness compromise results in a net reduction of wild healthy habitat. For each acre protected, other acres are trashed. And whenever wildland advocates promote compromise, they slam the door on the future of wild evolving life. Since politicians always compromise the proposals of advocates, the final solution is usually so watered down that virtually nothing of ecological value is saved. At best, we get rocks and ice.

Since our 1984 political defeat, bulldozers have ripped into the Idaho wilderness with a vengeance that might make Jim Watt choke up with pride. Critical potential additions to the RNR have been roaded, clearcut and mined, compliments of Smokey the Bear's bastard parents, the US Forest Service. Roadless gems like north Idaho's Mallard-Larkins, which the Idaho Fish and Game Department rates as the state's best unprotected wildlife habitat, continue to shrink under the dozer and chainsaw assault. Each day sees more roads, more denuded hillsides and spawning beds smothered by silt. So there are fewer bears, Marten, Lynx, Fisher, Puma, Boreal Owl, Pileated Woodpecker and Chinook Salmon. But you tend to forget the details; the reality of a true holocaust fades into obscurity with frightening ease when you're an ape in a suit on the Hill.

Which brings me back to October 1990. I was "working the Hill," with a contingent from the Alliance for the Wild Rockies, including, again, Carole King. But this time was different. The global ecological crisis had invaded society's consciousness. Even on the Hill there was a growing awareness of the current extinction event which threatens to exterminate a quarter to half of all known species by the 21st century. Moreover, people were at least beginning to hear the cries of conservation biologists, who warn us that existing national parks, wildernesses, and other nature preserves are too few, too small and too isolated to allow the evolution of large terrestrial vertebrates to continue.

In addition, this time we came to Washington with a regional bill that wasn't based upon artificial political boundaries. The Alli-

ance, a Missoula, Montana, based coalition founded by Mike Bader and Cass Chinske, had written the Wild Rockies National Lands Act, now the Northern Rockies Ecosystem Protection Act. This visionary Wilderness proposal would protect the remaining public land roadless areas of temperate America's last stronghold of healthy ecosystems, the "Wild Rockies" of Idaho, Montana, northwest Wyoming, and eastern Washington and Oregon. In addition to the various Wilderness and two new National Park designations, the bill also proposes a new pilot system of Wildland Recovery Areas and a new Wildland Recovery Corps (WRC, pronounced "work") that would employ people *restoring*, not destroying wild country.

Furthermore, this time we were prepared. The Alliance represented dozens of member organizations and businesses that supported the bill, and local support back home was growing rapidly. We were also prepared for resistance from the Washington environmental establishment. So we invited their representatives to meet with us. We lobbied the Sierra Club and The Wilderness Society as well as Congress. This time, nobody could accuse us of either lacking grassroots support or of excluding the national groups. It's no small matter that the Northern Rockies Ecosystem Protection Act (NREPA) is the first bioregional Wilderness bill based almost entirely on the precepts of the science of Conservation Biology, not politics.

NREPA has not yet been introduced in Congress, but I'm confident that it soon will be. Unfortunately, there's still resistance not only from regional politicians, but also from some "conservationists," again, for the stated fear of losing credibility.

Credibility, though, is a nebulous concept. With whom, exactly, do we want credibility? Let's chew on that a bit. Do we want to be credible with anti-environmental fanatics, like Steve Symms or a typical National Forest supervisor or timber company executive? I think not. They have no credibility with us. Better to be formidable with such vermin, not credible. What about "friendly" liberal Congresspersons? Here we enter a gray area. Because most politicians respond to issues on the basis of popular opinion (i.e., with the next election in mind), what lacks credibility at any given time can become credible as public support grows. Of course, the corrupting influence of big PAC money often renders any intelligent proposal unrealistic, or not credible. Yet the development of broad public support does change the way at least some politicians perceive reality. So in the end, we most emphatically do want to appear credible with the thinking portion of the public.

Contrary to what many mainstream conservationists would have us believe, the best way to build credibility is to eschew compromise when your proposals are based solidly upon good science and an overriding respect for life. Political compromise for expedience most often is a transparent attempt to appear palatable to all, and it diminishes credibility in the eyes of many potential supporters.

Stewart Brandborg is one of the most credible conservation leaders of our time. As Executive Director of The Wilderness Society (TWS) back in the 1970s, he presided over a lineup of grassroots organizers second to none, including Bart Koehler and Dave Foreman. Recently, "Brandy" founded Friends of the Bitterroot, a western Montana wildland conservation group and a member of the Alliance for the Wild Rockies. Brandy has lots to say about "credibility" and "political reality," including this: "I've come to the conclusion that most of the major steps we've taken in preserving wildlands have come about through bold conceptual legislation, like the Northern Rockies Ecosystem Protection Act."

Brandborg cites the Alaska National Interest Lands Conservation Act of 1980 as an example of a grassroots campaign that changed political reality: "When we started, we were told by Congressional leadership not to expect more than 20-30 million acres of protective designations." He and other conservation leaders refused to accept a given static idea of what was politically realistic. The environmental movement built credibility and changed "reality" by organizing its most extensive grassroots campaign ever. It educated the public about ecosystem protection in the far North. Eventually, well over 100 million acres of wild Alaska were designated as new National Parks and Preserves, National Wildlife Refuges, and Wilderness Areas. And there's little doubt that today, the American public and even its elected representatives are more aware of the need to protect wild ecosystems than they were a decade ago.

Like the Arctic and subarctic expanses of wild Alaska, the Wild Rockies can capture the imagination of the American people. This land of shining mountains is the stuff of childhood fantasies. Here are the Mountain Goats and Grizzly Bears of Glacier National Park, the big river wilds of central Idaho, the incomparable Yellowstone country, and the majestic Tetons, Sawtooths, Lemhis and Anacondas. The Wild Rockies have our last Grizzlies outside Alaska, and our biggest herds of Elk, Bighorn, and Pronghorn. They are where wild Bison still roam, in the upper Yellowstone, and where Trumpeter Swans, Bald Eagles, primeval forests and kaleidoscopic fields of flowers still

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thrive in a magnificence unlike any other. There's still room here for people and for critters. The big wildland ecosystems, though impaired to varying degrees, still function. And there's a magic in the high country, a lonely call of some deep primeval yearning, a humbling reminder of our primordial roots ...

I suspect that if we can't halt and reverse ecocide in the Yellowstone, Northern Continental Divide, and Greater Salmon Ecosystems, then we probably won't save much of wild Nature anywhere. But I have to believe it *can* be done. It'll take conservation leaders with the guts to envision and promote a new reality, and to build a true credibility that goes far beyond what is acceptable now to the suited apes on Capitol Hill.

*Howie Wolke is a wilderness trip leader, environmental writer, and naturalist who resides in the Bitterroot Mountains of Montana. Howie is well-known for his unabashedly uncompromising defense of unroaded lands; but rumors that he is unsatisfied with the Alliance for the Wild Rockies, and planning to form his own "Alliance for the Riled Wolkes," appear unfounded.*

*You can help the Northern Rockies by writing your representative (US House of Representatives, Washington, DC 20515) and senators (Senate, DC 20510). Ask them to work for protection of all remaining roadless lands in the Northern Rockies. Voice your support for the Northern Rockies Ecosystem Protection Act.*



Camille Barr

## Association of Sierra Club Members for Environmental Ethics

Ask Me About "ASCMEE"  
POB 1591  
Davis, CA 95617

### REFORMING THE SIERRA CLUB . . .

I love the Sierra Club.

That's why I want to change it.

Recently I asked myself why the leadership of the Club, the most respected environmental group in the United States, was taking political positions out of step with scientists' recommendations for protecting endangered ecosystems. I went back to my indispensable copy of *The Sierra Club: A Guide*<sup>1</sup> and read the "Purpose of the Sierra Club," reproduced here:

- To Explore, Enjoy and Protect the wild places of the earth;
- To Practice and Protect the responsible use of the earth's ecosystem and resources;<sup>2</sup>
- To Educate and Enlist humanity to protect and restore the quality of the natural and human environment; and *To Use All Lawful Means to carry out these objectives.* (emphasis added)

I became convinced that the problem is not the Club itself but the way the Club is being run. For a venerable group entering its second century, the distance between the Club's stated purpose (and, indeed, its public image) and its practice is disturbing.

I asked myself what John Muir would say about the current direction his beloved Club has taken. I believe he would share my concern that change is needed.

Activists know well the Earth First! slogan, "No Compromise in Defense of Mother Earth." Today this rallying cry is being adopted by some rather conventional members of mainstream groups asking why conservation

## Movement Mutterings

biologists' findings are not being translated into Club policy, and political and environmental education campaigns.

As the biodiversity crisis has become ever more severe, disturbing news about the internal operations of the big environmental groups, including the Club, has been revealed. Financial conflicts of interest within the leadership, and questionable fundraising activities are leading to a potential crisis of confidence and possible loss of support from the vital grassroots constituency of the environmental movement.

In my opinion, the Club has, over its first century, grown into a large bureaucracy with all the attendant institutional inefficiencies bureaucracies have. The Club's saving grace is its democratic structure, allowing for change when necessary. A democratic bureaucracy is capable of changing with the times, and must, if it is to remain viable.

Today the Club must change. No longer can we tolerate major environmental losses because we deferred to "political realities." Let us begin setting policy according to *biological* realities. We must adhere to the Club's statement of purpose; we must hold to our vision, with passion and conviction. We must hold the line, or else concede it.

Steps must be taken to prevent unscrupulous individuals from taking advantage of the Club's democratic process, subverting it for their own ends. Press reports tell of corporations with poor environmental records donating large sums to environmental groups.<sup>3</sup> Is this "hush money?" Reports from some chapters suggest that unethical and *anti-environmental* behavior by a certain few Club leaders is occurring.<sup>4</sup> Such activity undermines the good work of the many dedicated, ethical, and effective Club members in groups and chapters everywhere.

In an organization with the influence and reach of the Club, members must demand ethical conduct from the leadership. As society becomes more environmentally-conscious, the Club attains a more prominent role in shaping public policy. Club leaders at many levels today make decisions that affect indi-

vidual and corporate profits. The Club should hold its officials to the highest ethical standards. Many members have precious little awareness of the potential for abuse here. The US Congress has stricter disclosure requirements than the Club!

Another problem is the inconsistent positions some leaders have taken regarding protection of wildlands. Some Club leaders are not protecting "the wild places of Earth." In some cases, they are failing to work for progressive, environmentally sound legislation. In the most egregious cases they are actively working against it. This situation must not continue. The "Compromise First!" mentality must go.

The Club's lobbyists should support all "good" legislation, especially the progressive bills. Strong positions fire the public's (and Congress's) imagination. Weak bills (and bills leading to partial solutions or compromises) fail to inspire and should be supported only as a last resort.

The tendency to compromise too much damages not only the environmental legislative agenda, but also activists' morale. Many energetic environmentalists avoid the Club or have left it. We need these knowledgeable, dedicated people. The common refrains are the Club is out of touch with the grassroots and it compromises too much, too soon. Club leadership generally ignores or dismisses these complaints.

In response to these concerns, I am seeking to establish a new organization-within-an-organization, a "fundamentalist" group dedicated to restoring the Club to its rightful place at the cornerstone of the environmental movement, achieving its most noble objective: to protect. Following the spirit of John Muir, this group will work to make the Club as environmentally ethical, aggressively pro-wilderness, and biocentrically visionary as possible. We must act quickly.

I invite all concerned current and former Club members and potential members to come together under a new banner: the Association of Sierra Club Members for Environmental Ethics (ASCME).<sup>5</sup> The purpose of ASCME is simple: get the Club to fulfill its own stated purpose. ASCME's motto: we're not taking the Club over, we're taking it back.<sup>6</sup>

(Two possible slogans for ASCME come to mind: "not blind opposition to compromise, but opposition to blind compromise," and "Compromise-free by '93.")<sup>8</sup>

To become a charter member, send me a card with your name, address, phone and Club membership number from your Sierra mailing label. I'll send you more information on ASCME. In response to overwhelming demand, a separate category for "associate mem-

bers" exists for those who are not now Club members but who promise to join when the Club resumes its leadership role in the environmental movement.

—David G. Orr.

*P.S. If you haven't yet, please join the Sierra Club. It's a wonderful group.*

## FOOTNOTES

<sup>1</sup> Sierra Club, 1989. Required reading. No Clubber should be without one.

<sup>2</sup> This line needs modification toward a more biocentric perspective.

<sup>3</sup> For example, Greenpeace recently released a report detailing the contributions of Waste Management, Inc.—the world's largest solid and hazardous waste disposal firm—to several large groups, including the National Audubon Society and The Nature Conservancy.

<sup>4</sup> For example, recent issues of Corporate Crime Reporter, especially v. 5 no. 13 (1 April 1991) "California Environmental Groups Say Sierra Club's Proposed Logging Agreement is Influenced by Industry." The Club is not unique among the big environmental groups for apparent lapses in ethical policy- and decision-making.

<sup>5</sup> A highly-placed Club leader recently intervened in a timber sale appeal on behalf of the Forest Service District Ranger's decision to log in an ecologically significant roadless area. The Forest Supervisor sustained the appeal by a local grassroots conservation group, over the objections of the Sierra Club leader.

<sup>6</sup> With gratitude to the Association of Forest Service Employees for Environmental Ethics (AFSEEE), the internal reform movement within the US Forest Service. The courage of AFSEEE members to speak out has inspired me to attempt the same type of reform within the Club. ASCME is not affiliated with AFSEEE.

<sup>7</sup> With gratitude to the Club for its motto "not blind opposition to progress, but opposition to blind progress."

<sup>8</sup> With appreciation to the grassroots movement to end livestock grazing on US public lands, for its slogan "Livestock-free by '93." I support their efforts.



## SONGS FOR A BETTER EARTH!



Photo: Darius Kinsey, Whatcom Museum

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# Trading With the Enemy

by David G. Orr

This story is part of the continuing saga of the environmental movement's attempts to reform California's 1973 Forest Practices Act (FPA). Over the last decade, as the ancient forests fell to the saws, the environmental community has worked to bring about effective regulation of the timber industry on private lands, trying to save whatever is left. Lawsuits, lobbying, protest rallies, a failed ballot initiative, and even civil disobedience have proved helpful, but not effective, at shifting the focus of the debate from the industry's argument for protecting private property rights (the right to destroy ecosystems) toward the ecologists' argument for protecting biological diversity and forest-dependent species.

Today a new tool is being employed in the fight for the forests. Alternative dispute resolution (ADR) is causing a revolution in the way natural resource issues are addressed. A number of ADR techniques are currently in use<sup>1</sup> but this article focuses on the negotiated settlement agreement (NSA) approach being used to reform the FPA. The Sierra Club and the state's largest timber company, Sierra Pacific Industries, have chosen the NSA method to reach a "solution" to the intractable problems of trying simultaneously to manage industrial forests for profit and environmental protection.<sup>2</sup>

This article describes the current negotiations process, how we got here, and where we appear to be going. There are lessons here for activists in other places. Although the NSA may work well in some situations, grassroots activists in California feel in this case the process has been implemented clumsily and with little regard for the protection of biodiversity.

We got here because California voters last November rejected the nation's best-ever proposal for private-lands forest reform,

Proposition 130. The grassroots effort to reform logging practices resulted in a disappointing loss, but the close vote (48-52 percent) encouraged elected officials to move the fight into the California legislature.

The failure of Prop. 130, better known as "Forests Forever," at the polls surprised environmentalists. Most experts agreed 130 was defeated by its bond measure for habitat acquisition, not because of voter antipathy toward protecting the environment through the initiative process.<sup>3</sup> Yet, before the last ballots were counted, the Sierra Club was working quickly and quietly to exploit the momentum of the 130 campaign to muscle the 1991 legislature into amending the Forest Practices Act.

Leaders in the Club's statewide organization, Sierra Club California, agreed to a proposal by the President of Sierra Pacific Industries (SPI) to negotiate a legislative package amending FPA that the Club would endorse. The advantage for SPI was that the Club, in exchange, would not be able to support a stronger initiative in the future.

Here is how the proposal was set up:

First, SPI invited the Club to negotiate an agreement. The Club would agree to lobby the other groups (National Audubon Society, The Wilderness Society, Natural Resources Defense Council, etc.) for their support while SPI would work to bring the other companies (Georgia-Pacific, Louisiana-Pacific, Simpson, etc.) into the process.

With the backing of their respective camps, the negotiators would draft language to submit to the legislature by 8 March 1991, the deadline for submitting new bills. A pro-timber and a pro-environment legislator from each house would each sponsor a portion of the package, all agreeing not to entertain amendments without first securing approval from the leaders of both negotiating teams.<sup>4</sup>

The object, for the companies, is to "solve" the problem of constant demands from environmentalists to protect habitat. Companies want to log, but they know they are suffering from bad public relations. The major

issues they must address are (1) ecologically sound, sustainable silviculture, (2) protection of ancient forests, (3) protection of wildlife and fisheries, and (4) environmental community representation on the State Board of Forestry. SPI would like to get the environmentalists to agree on something not too onerous for industry, pass it, and be done with it for twenty years.

The cynic's view of the scheme is this: Big Timber makes a show of generosity, condescending to the environmentalists' demands for the sake of "certainty," while loopholes in the law permit a return to business as usual.

The problem for environmentalists is that, in accepting the offer to negotiate, they lost the ability to negotiate from a position of strength. Think about it: SPI was desperate to avoid another initiative because *the timber companies almost lost on 130*. Accepting the offer to negotiate on a fast track was not the most strategic move for the Club to make.

Yet the Club went along with the plan and now, six months later, we have the "Sierra Accords," a product of intense negotiation and compromise. While there is reason to applaud the efforts of the negotiators, there is, as well, reason to criticize.

Just before press time, the Club's head negotiator, Gail Lucas, met with an activist alliance and coalition of over thirty small groups known as the California Forest & Watershed Council<sup>5</sup> to discuss the activists' dissatisfaction with the legislation. The Council demanded an equal say with the Club in negotiations over floor amendments to the package.

The Council has sought a hearing for its own proposal but has been ignored by the Club and the politicians. These are the activists who made forest reform a household term. By excluding these interested parties from the process, Lucas, *et al.* damaged their credibility with local experts and created a climate of distrust and division between the Club and the small, active environmental groups.<sup>6</sup> This is counterproductive for our movement. Big

groups should be assisting, not resisting, the small ones.

The grassroots is the source of the clamor for reform of FPA in the state. They experience firsthand the effects of cut-and-run timber operations. Without their on-the-ground support and advice, the reform movement would have little of the expertise and data necessary to define and refine the terms of the environmentalist agenda for forestry.

## BACKGROUND ON FORESTS FOREVER

Grassroots activists created Forests Forever. The initiative would have meant a ban on clearcuts, drastic curtailment of logging in old-growth forests, bonds for acquisition of ancient forest habitat, and reform of the Board of Forestry. The major obstacle to passage was money; only the support of the major groups could bring in sufficient cash.

Endorsements were sought from the national groups. Some signed on immediately, others hesitated. Support from the Club, with over 200,000 members in California, was crucial. Although the Club approved the initiative in concept, the decision-makers demanded the language be changed from a ban on clearcutting to permitting clearcuts of up to 5 acres in size.<sup>7</sup> Reluctantly, the authors consented, and the Club then gave its all-important endorsement.

With the Club on board, word of the initiative quickly spread. A wealthy San Mateo financier, Harold Arbit, contacted the campaign, making an offer few environmentalists could refuse: a \$1 million campaign contribution. Thus began a long and sometimes difficult relationship between the Sierra Club, the "nonaligned" forest activists, and the reclusive multimillionaire Arbit.

As the campaign wore on, Arbit managed to establish a reputation for himself as a principled "eco-philanthropist," despite being attacked in print by the timber companies as an opportunistic, self-interested manipulator of the initiative process (Arbit's company deals in L-P and G-P stock). By 6 November, Arbit had contributed over \$5 million to the Forests Forever campaign, making him far and away the campaign's prime benefactor.

The initiative's unexpected failure at the ballot box was a surprise even to the timber companies, whose own polls had predicted an easy victory. Red Emerson, President of SPI (contributor of one of the largest sums to the No on 130 campaign), contacted Arbit on 7 November, seeking a "truce" in the timber wars.<sup>8</sup> Emerson, assuming Arbit would back another Forests Forever initiative (a valid assumption), had every reason to want to nego-

## THE WORLD HAS NOT QUITE EVOLVED INTO A BIRD FEEDER

On the bird feeder the Acorn Woodpecker chases away the California Jay

Which earlier had chased away the Steller Jay

Which had chased away the Brown Towhee

Which had chased away the Rufous Sided Towhee

Which had chased away the Slender Billed Nuthatch

Which had chased away the Plain Titmouse

Which had chased away the Junco

Which had chased away the Ruby Crowned Kinglet.

Making it all seem very much like the human world except that none takes more than he needs and eventually each bird person gets his share.

—J.P. Bernhard

tiated. The industry could not afford more initiatives. If Arbit could be persuaded to support negotiations, he could perhaps be kept from financing a new campaign. The absence of his financial support could prevent the resurrection of Prop 130.

## THE NEGOTIATIONS PROCESS

Arbit took the bait. He arranged for Sierra Club to hire Gail Lucas to represent the Club in negotiations with industry. Contacts were made with key legislators in Sacramento, setting up a plan that called for a signed agreement to be produced in time for the 8 March deadline for filing bills. Once the package was introduced, the legislators agreed, no amendments would be accepted without the agreement of all signatories to the accords.

These negotiations were on a fast track, making it difficult if not impossible for most environmentalists to provide meaningful input into a very complex process (just what the industry wanted). Pleas from the grassroots for inclusion were ignored.

With the negotiations nearly complete, on 2 March Lucas presented her program to the Sierra Club California Conservation Committee, seeking formal endorsement of the agreement in concept (the specific language

was not yet final). Objections to the Club's endorsing such an important document without first seeing the actual text were raised. There would be no time for review of the many technical details of the proposal ... but Lucas pressed on. A motion to end debate was presented and passed before any debate really happened. The Club gave its endorsement, in this case when a large number of people with only vague knowledge of what they were voting on staked the Club's reputation on the word of one person that the agreement would be sound.<sup>9</sup>

The Club's endorsement secured, Lucas then sought support for the plan among other major environmental groups. She received endorsements from at least seven other statewide groups.

An article in *Corporate Crime Reporter* of 1 April<sup>10</sup> detailed the opposition of North Coast activists (including Club members) to the accords. Both the content and the process of the negotiations were criticized, as was the process by which the Club's endorsement was gained. One activist was quoted as saying "the Sierra Club acted more like they were Sierra Pacific than Sierra Club."

At the 2 March meeting, Lucas warned the Conservation Committee that Arbit would

*continued next page*

finance no more initiatives, making the NSA the only viable FPA reform opportunity in the foreseeable future. This was the persuasive argument for many Club leaders. At a subsequent meeting of the Northern California Conservation Committee 4-5 May, however, a new strategy was announced: Arbit would support an initiative—to be used as leverage to move the stalled legislative package through the Capitol. Few questioned the apparent shift in strategy.

Meanwhile, industry's lobby group, the Timber Association of California (TAC), met on 20 March to consider endorsing the accords. Since SPI was the only company involved in the negotiations<sup>11</sup>, it would not be easy to sell. The other companies did not see any need for it. Some feared SPI used its place at the table to insert language that would confer a competitive advantage to SPI. TAC voted down the agreement. This was not unexpected, for the big companies had opposed the NSA from the outset, feeling they had nothing to gain and everything to lose, as long as they held the ultimate Sacramento advantage: superior lobbying power.

The Legislature accepted the terms and introduced the package. Immediately, industry lobbyists produced weakening amendments which Lucas accepted. The package then passed the Senate and is now awaiting action by the Assembly. Governor Pete Wilson announced plans to submit amendments of his own<sup>12</sup> before signing the bill into law.

By the end of April, drafts of the new, Arbit-backed initiative were circulating widely on letterhead titled interestingly "Initiatives R Us," to grassroots activists and major environmental groups for comment. The draft contained modified Prop 130 language with some new material covering sustained yield requirements. This new effort also was put on the fast track: signature-gathering is scheduled to begin in mid-June.

The intent behind this new initiative is not to make it law but to lever the timber companies into dropping their opposition to the accords. The announced game plan assumes this initiative will remain viable only as long as the legislature does not pass the accords. According to knowledgeable sources, Arbit will abandon the initiative once the accords pass, right up to the day the ballots are printed.

Circulation of the petitions begins soon. With the help of many dedicated Club volunteers throughout the state, the initiative should qualify easily and quickly. Local groups and chapters will be involved in the effort. But if all goes according to Arbit's plan, the legislature will approve the accords, and Arbit will have the initiative withdrawn.

The political strategy does not mention

what to do about the volunteers. How will they see their role in the political process? Are they being used?

A more important, and subtle, concern is that the Club's credibility with the public could be damaged if the FPA reforms are not handled skillfully. The terms of the accords are not adequate to ensure protection of California's last ancient forests in private hands.<sup>13</sup> What will the public think of the Club's leadership when ancient forests continue to fall after the problem is supposedly "solved?" What will the Club tell those volunteers who realize that real protection was possible but expediency won out?

If Californians settle for the weak provisions embodied in the Sierra Accords, environmental groups will be effectively bound to the agreement by legislators and by industry—even those companies that refused to participate previously. The accords are attractive to some as a "final solution." Industry demands "certainty;" politicians avoid controversy.

The main beneficiaries of the accords are the politicians. They don't have to do anything: they have a political solution they can manage but not be responsible for. They carry the legislation but they don't write it or amend it. It's all done for them so that whatever the outcome, they can plead ignorance (believable) and stand for re-election without having angered either side!

What is needed here is a strong dose of environmental ethics! Why should the Club play these games? Instead of playing politics, environmentalists should be playing hardball. We need to be aggressive and take the offensive! We don't have to rush things. The terms of the accords were drafted in four months. Should the people of California settle for a quick deal?

## RECOMMENDATIONS

There is only one real solution: go for another initiative. The legislature is hopelessly corrupted by industry. Take Arbit's initiative, or better yet, draft an initiative that takes into account the concepts of conservation biology and landscape ecology and ditch the accords.

The Sierra Club should call a meeting of the interested groups, large and small, to map out a strategy for a campaign to pass the most stringent forest protection measures ever—legislation that would serve as a model for the nation. This opportunity may not present itself for long because politicians in Sacramento are calling for dismantling or disabling the initiative process.

The direction is clear: the major groups must move away from the "old" politics (the way they expect us to play it). We still can be

"nice," but we don't have to be "easy." We must become creative, aggressive, and fearless. We are defending the planet. The timber industry, like most ravagers of Earth, plays for keeps. We, the defenders of Earth, should play for keeps, too.

## ADDITIONAL READING

Fiss, *Against Settlement*, 93 Yale Law Journal 1073 (1984) — discussion of negotiations between parties of grossly uneven bargaining power.

Susskind & Weinstein, *Towards a Theory of Environmental Dispute Resolution*, 9 Boston College Journal of Environmental Affairs 311, 336 (1980) — nine steps to resolving environmental disputes.

Tribe, Schelling, & Voss, eds., When Values Conflict: Essays on Environmental Analysis, Discourse and Decision (1976) — fundamental differences on values between parties make some agreements nearly impossible to achieve.

MacDonnell, *An Overview of Environmental Dispute Resolution*, 28 Natural Resources Journal (1988) — background to the field.

## LATE BREAKING NEWS

Inside sources describe efforts by Sierra Club's Gail Lucas to make major concessions to the timber industry in an effort to break the impasse over the "Sierra Accords" negotiated settlement agreement. As details of the concessions become known, we will report them.

Sources also indicate that East Bay Municipal Utility District (EBMUD) has joined as a signatory to the accords. EBMUD, one of the largest utilities in the San Francisco Bay Area, provides water for urban customers from reservoirs in the Mokelumne River watershed in the central Sierra Nevada, an area heavily impacted by logging by Georgia-Pacific Corporation and other companies. It was not possible to confirm the reasons for EBMUD's decision to become involved in the forestry compromise.

*David Orr works in the UC Davis Law Library and teaches "Forest Ecology for Activists" at UC Davis Experimental College. He can be reached at POB 1591, Davis, CA 95617.*

## FOOTNOTES

<sup>1</sup> ADR techniques include mediation, arbitration, conciliation, negotiated settlements, and certain combinations of these. For an overview of approaches to conflict resolution, see Goldberg, Green & Sander,

Dispute Resolution (1985); Kanowitz, *Alternative Dispute Resolution* (1985); and Bacow & Wheeler, *Environmental Dispute Resolution* (1984).

<sup>2</sup> A negotiated settlement agreement is only one of several specific, alternative means of resolving environmental disputes. The field of alternative dispute resolution (ADR) evolved in the last two decades largely in response to dissatisfaction with expensive litigation and the "win-lose" character of courtroom settlements. See Fisher & Ury, *Getting to Yes: Negotiating Agreement Without Giving In* (1981). Although the most common types of disputes resolved through ADR are urban land use questions, a small number of timber management issues have been resolved this way. Only one was of a policy nature (the others were site-specific). See Bingham, *Resolving Environmental Disputes: A Decade of Experience* (1986).

<sup>3</sup> Political scientists say California's initiative process is today the most viable of its kind in the nation. It is open and democratic, affording grassroots groups with little cash the opportunity to go directly to the voters. If an effective environmental initiative can pass in an influential state such as California, then it can serve as a standard for other states (other countries?). The failure of Prop. 130 can be seen as an opportunity to move on to a more comprehensive and visionary framework for protecting ecosystems. Various proposals for an Endangered Ecosystems

Initiative have been made recently; if any state can pass one, California should be able. Please send suggestions to the author.

<sup>4</sup> The bill authors do not, of course, have absolute control over the shaping of the final language of the package at the floor vote, so the outcome of the weeks of negotiating still is very much in doubt when the floor opens for amendments. Timber lobbyists are already hovering around with their suggested "improvements," seeking to protect the God-given property rights of their corporate employers.

<sup>5</sup> The F&WC was formed in response to the Club's refusal to involve activists in the negotiations.

<sup>6</sup> See Cormick, "Intervention and Self-Determination in Environmental Disputes: A Mediator's Perspective," *Resolve*, (Winter 1984). The author provides a "checklist" for considering whether negotiation is likely to work. In the case of Sierra Accords, answers to the following are in doubt: "Are all parties represented who have a stake in the outcome of the negotiations? Are the negotiators for each party able to speak for their constituency? Is there reason to believe that if the negotiators reach an agreement, that agreement will be honored by the groups they represent?"

<sup>7</sup> Personal communication with knowledgeable sources inside the campaign.

<sup>8</sup> Personal communication with knowledgeable sources inside the campaign.

<sup>9</sup> To help ensure an effective process and a good outcome, technical aspects of NSAs should be reviewed by a team of knowledgeable people before being finalized.

<sup>10</sup> See 5 *Corporate Crime Reporter* 13 at 6 (1991). This obscure weekly is an invaluable tool for activists, providing current information on environmental crimes and unethical behavior, including stories on environmental groups. Unfortunately, it's hard to find and very expensive. Try your local law library. Contact CCR at 1322 18th St. NW, Washington DC 20036; (202) 429-6928.

<sup>11</sup> At the outset, Simpson Timber Co. sent a representative who was soon withdrawn.

<sup>12</sup> Any amendments are almost certain to substantially weaken the already-dilute provisions of the compromise.

<sup>13</sup> Under the terms of the accords, ancient forests may be cut on 25-year intervals, with 50 percent of stand volume removed at each entry.



## LEGISLATIVE CORNER

*ed. note: We invite readers to send us reports on good and bad bills. Please include bill numbers and sponsors, as well as background information.*

*Write your senators at US Senate, Washington, DC 20510.*

*Write your representative at US House of Representatives, Washington, DC 20515.*

### MAJORS MOVE MILQUETOAST MEASURES

The bills we told you about in the last Legislative Corner are still being considered by Congress, though Jontz's Ancient Forest Protection Act (HR 842) reportedly hit some hard times when Sierra Club lobbyists began privately backing off from supporting even this weak compromise. Apparently, Club lobbyists felt that the Jontz Bill won't pass, so it would be smart to pretend to have supported the (weaker) Vento Bill all along. If the Vento

Bill passes, the Club could then claim a Victory! [See Ancient Forests article this issue.]

The big news, however, has to do with efforts to get the Northern Rockies Ecosystem Protection Act (NREPA) squashed. It seems that certain US representatives in the House want to introduce this comprehensive Wilderness proposal, but some "Big 10" lobbyists have intervened directly to prevent its introduction! No one will say anything on the record, but it looks as if the Sierra Club's principal lobbyists may have made unsubstantiated allegations concerning the

proposed Wilderness Areas, apparently to intimidate those representatives (under threat of losing Club support in the next election?) and prevent them from introducing and/or supporting the NREPA.

NREPA calls for about 15 million acres of new Wilderness, more than 1000 miles of new Wild & Scenic Rivers, two new National Parks, and Wilderness Study Areas. It seems the Sierra Club's paid lobbyists will go to any lengths to ensure that we get no new Wilderness unless we ask their permission first. Of course, the Club's leaders haven't asked its members lately ...

Meanwhile, the Idaho State Legislature has sponsored a series of closed-door negotiations to devise a compromise "Idaho Wilderness Bill." Reportedly, the negotiations have excluded small local groups pressing for comprehensive wildlands protection. The big groups have supposedly said that these local groups do not deserve to be represented because they do not have the funding to be able to litigate or mobilize major political pressure.

It is also reported that the "Majors" (in this case, the Sierra Club, The Wilderness Society, and the Idaho Conservation League) have negotiated another historic compromise: "Compromise Release Language." In re-

*continued next page*

sponse to timber industry demands for "hard release language, or no Idaho Wilderness Bill at all," our environmental representatives seem to have supported hard release language under a new name. You might want to watch your backs.

In the same vein, it is appropriate to mention the Lolo-Kootenai Accords. In the guise of a new Wilderness bill for Montana, and introduced by the Sierra Club's pal, Max Baucus (D-MT), this proposal (S 72) would release 98% of the "suitable timber base" in the Lolo and Kootenai National Forests to the timber industry. While the Sierra Club and The Wilderness Society haven't endorsed it, they'd sure like to do what they can to make Mr. Baucus happy.

Since none of the participants is willing to talk about these negotiations publicly, we have had to rely on the reports of witnesses and interlocutors. The participants may deny all of the above.

The Big 10 notwithstanding, support is urgently needed for the Native Forest Protection Act and the Northern Rockies Ecosystem Protection Act. Opposition is needed to the Lolo-Kootenai Accords, or to other "wilderness bills" that would open Northern Rockies wildlands to developers.

Opposition is also needed to the various bills under consideration that would weaken protection for wetlands. Congress is debating legislation to weaken Section 404 of the Clean Water Act, thus subverting the primary wetlands protection statute. Congress needs to hear that absolutely no further loss of wetlands is acceptable.

—Hart Schaefer

#### URGE SENATE TO RAISE GRAZING FEES

Raising grazing fees to fair market value and devoting the money to range and riparian restoration would be big steps toward range management reform, as well as good fiscal policy. Last fall, the US House of Representatives voted 254-151 to do this, but the provision did not make it through the Senate. This summer, Representative Mike Synar (D-OK) will reintroduce the provision as an amendment to the 1992 appropriations bill.

All receipts from grazing fees should be deposited in the Federal Treasury and made available for range and riparian restoration programs via the normal congressional appropriations process. Currently, local "Grazing Advisory Boards" comprised of permittees "advise" BLM on how 1/4 of their grazing fees should be spent, usually on "range improvements" for livestock, not wildlife. Raising

grazing fees without changing how the money is spent would just lead to more stock tanks, roads, and fences on public lands.

Write your senators saying you don't want to subsidize the destruction of public lands by livestock grazing. (See Public Lands Action Network article this issue for information to include in letters.) Emphasize that extra funds raised by increasing grazing fees to fair market value should all be used to restore overgrazed lands.

—PLAN, POB 5631, Santa Fe, NM 87502

#### STOP THE COLORADO WILDERNESS SACRIFICE BILL!

Colorado's US senators, Tim Wirth and Hank Brown, have agreed on a Colorado National Forest wilderness bill that would designate only 641,000 acres as Wilderness (out of 2.5-3.5 million acres still roadless on National Forests in Colorado) and would deny federally reserved water rights to the Wilderness. The bill is being carried in the House by Representative Ben Nighthorse Campbell.

The following are a few of the completely or partially omitted areas that should be fully included in the bill (acreage for the Wirth/Brown bill is in parentheses):

- 64,000 acres of the Piedra roadless area in the San Juans. The Wirth/Brown bill omits the area proposed for the Sandbench timber sale this summer and the crucial connecting corridor to the Weminuche Wilderness. (W/B—50,000)
- Montezuma Peak/Clamshell/Blanco addition to the South San Juan Wilderness. This 30,000 acre area is habitat for Lynx and possibly Grizzly Bear, and includes part of the land proposed for the East Fork ski resort. (W/B—12,000)
- 30,000 acre V-Rock addition to the South San Juan Wilderness. (W/B—7000)
- Chama Basin addition to the South San Juan Wilderness. Last fall a cowboy on the private land between here and the V-rock roadless area said he saw a Grizzly with two yearling cubs. A minor paved highway and a railroad separate this 23,600 acre area from the Cruces Basin Wilderness in New Mexico. (W/B—0)
- The 256,000 acre Sangre De Cristo roadless area. The Senate bill divides this into several segments to permit ORVs to drive through and new water facilities to be built. (W/B—207,330)
- Ute Creek on the Uncompahgre Plateau, which has no designated Wilderness: 43,300 acres. (W/B—0)
- Tabeguache, 19,040 acres on the

Uncompahgre Plateau. The compromise omits most of the huge aspens in the watershed of North Tabeguache Creek, as well as some of the low elevation main stem of Tabeguache. (W/B—16,740)

• Pawnee, at 18,640 acres, is the only area proposed as Wilderness by the Colorado Environmental Coalition on the Great Plains. (W/B—0)

Please write to Representative George Miller, chair of the House Interior Committee, and the three above-mentioned Colorado congresspersons. Insist that any Wilderness bill include full water rights, and that it protect at least the 1.6 million acres proposed by the Colorado Environmental Coalition.

—Michael Robinson, POB 12243, Boulder, CO 80303



## ANOTHER VICTIM OF GALLOPING CONSUMPTION.



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# Alien Plants Threaten Natural Communities

Alien plants, introduced from abroad, have become major components of our flora. Over 20% of plants listed in Roger Tory Peterson's *Field Guide to Wildflowers* are exotic. Some alien plants spread aggressively and smother natural communities. A growing number of ecologists consider these "biological invasions" to be as threatening to biological diversity as global warming, ozone depletion, and human population growth. It is no longer sufficient to set aside conservation areas; many must be managed to prevent loss of their biological riches.

The spread of alien plants often begins in areas already disturbed by human activities. The danger is that the alien plant can spread from these sites into relatively pristine areas. Invasion by alien plants affects 88 National Parks, including Great Smoky Mountains and Everglades. It will cost the National Park Service \$30 million to control these infestations.

In eastern North America, Florida faces the gravest threat, but all states are affected. For example, in Illinois, alien plants are considered second to land clearing as a threat to natural areas.

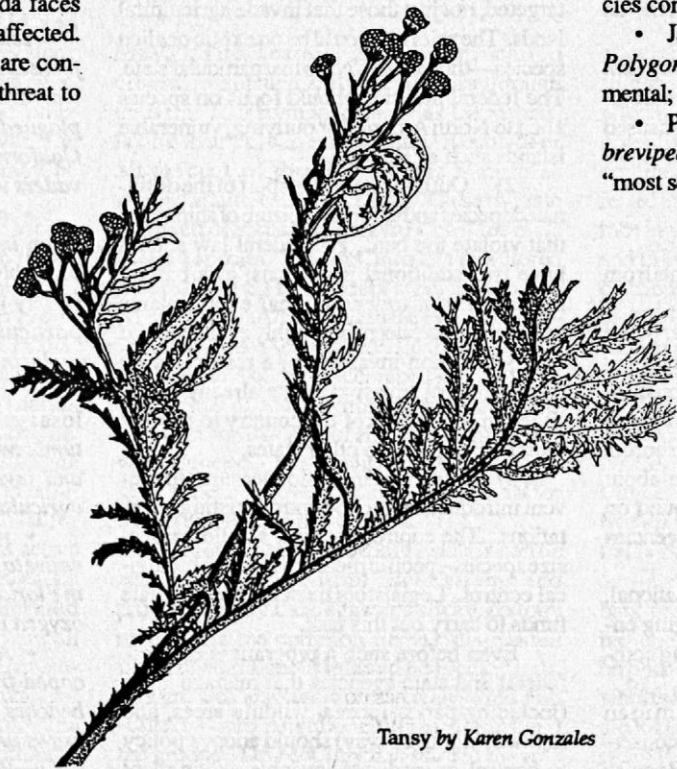
"Without an active and effective control program it seems possible that every marsh and open wetland in northern Illinois could be lost to purple loosestrife and smooth buckthorn; every mesic prairie in Illinois could be overrun by giant teasel and white sweet clover; and every forest in southern Illinois could eventually have its ground cover replaced by Japanese honeysuckle and purple winter creeper." (John E. Schwegman, "Exotic Invaders," *Illinois Outdoor Highlights*, 3-88)

Effective counter measures are hampered by the public's failure to understand the threat posed by invading plants. The danger is not widely perceived for three reasons. First, most people judge an area's

biological value only by the presence of large vertebrates, and many exotics provide food or shelter for these animals. Second, the exotics' takeover occurs more slowly than bulldozing. Finally, most people cannot recognize either native or exotic plant species, so they do not notice the change.

Experience has shown that biological control (introduction of natural enemies) can be the least intrusive method for controlling invasive aliens in natural areas. Such controls, applied only after careful testing, have minimal effects on other elements in the environment, and cause no pollution. Furthermore, once the initial research and testing have been carried out, biological controls are economical to use.

Unfortunately, current federal and state "weed" control programs are focused on agricultural pests, rather than plants that invade natural areas, and rely heavily on herbicides.



Tansy by Karen Gonzales

They also lack sufficient funds to carry out the research needed to make a biological control program environmentally safe and effective. An environmentally sound biological control program requires funds to locate insects or pathogens that appear to retard the target species' growth, evaluate their effectiveness, and test to ensure that the chosen control agent will not become a pest itself. This final test is expensive but *crucial*.

## EXAMPLES OF INVASIVE ALIEN PLANTS THREATENING NATURAL AREAS

### WOODLANDS:

- Kudzu *Pueraria lobata*: once planted to control soil erosion; by 1981, kudzu covered 7 million acres; most widespread in South, but now found as far north as New York and Massachusetts.

- Garlic mustard *Alliaria petiolata*: rapidly replacing native wildflowers in 7 river drainages in Illinois; spreading along river bottoms in other states.

- "Burning bush" *Euonymus alata*: used in highway planting; in Illinois, one colony eventually outnumbered all other woody species combined by 10 to 1.

- Japanese knotweed or Japanese bamboo *Polygonum cuspidatum*: introduced as ornamental; spreads by underground rhizomes.

- Porcelain berry vine *Ampelopsis brevipedunculata*: introduced as ornamental; "most serious pest" in the woods at Wave Hill preserve in New York; seeds spread by birds.

- Japanese honeysuckle *Lonicera japonica*: serious pest of woods; forms dense mat on ground, twines around trees; common throughout eastern United States.

- Amur honeysuckle, shrub honeysuckle *Lonicera maackii*: grows in dense groves (can become primary understory shrub) and shades out herbaceous ground-cover; berries spread by birds.

- Chinese privet *Ligustrum sinense*: common hedge plant; has become the dominant understory shrub in some areas of Louisiana.

continued next page

## GRASSLANDS / MEADOWS

- Multi-flora rose *Rosa multiflora*: promoted in 1930s for soil erosion control and as living fence; now classified as a noxious weed by New Jersey, Iowa, Illinois, Ohio, and West Virginia.

- Autumn olive *Elaeagnus umbellata*: first mass-planted in 1960s; by 1981, widespread dense populations (up to 14,000 plants per acre) in east-central Illinois; West Virginia has outlawed sale and planting.

- Crown vetch: planted on steep road-sides; despite claims, does not halt gully erosion; seeds spread by mammals; smothers native plants of dunes along Lake Michigan and prairies throughout Illinois.

## WETLANDS AND WATER BODIES

- Purple loosestrife *Lythrum salicaria*: since 1940s, spreading at rate of about 645 km<sup>2</sup> per year; now reaches from New Brunswick to South Carolina, from British Columbia to California; spread assisted by planting as ornamental; of virtually no value to wildlife, crowds out important wildlife food plants and endangered wetland orchids; now illegal to plant in Illinois.

- *Hydrilla verticillata*: escaped from aquaria; spreading rapidly in warmer freshwater systems, perhaps hardy as far north as Massachusetts.

- *Egeria (Elodea) densa*: (giant waterweed) aquarium plant aggressively weedy in Southeast, found as far north as Massachusetts.

- Chinese tallow tree *Sapium sebiferum*: replacing coastal prairies in Louisiana, aided by grazing and other human-caused disturbances.

## WHAT YOU CAN DO

- Eliminate invasive exotic plants from your own property and public parks.

- Educate others about the threat posed by invasive exotic plants. Write articles for gardening and conservation publications; invite speakers to address your club. People responsible for nature centers and arboreta should produce educational materials about invasive plants and label examples found on their grounds. Urge natural resource agencies to join this educational effort.

- Ask colleagues to write their national, state, or provincial representatives urging enactment of a program with the following components:

Place responsibility for the program in an agency that represents natural resource conservation as well as agricultural interests. Require

walking along the trail I see beartracks.

I hear them, turn around  
to see the bear behind me—  
it is a sunny day but still  
there is snow on the trail.

I think how pleasant it would be  
to die here and become bear fat,  
to climb back up the avalanche chute,  
look back across the muskeg  
to the volcano, where the ducks  
go (they live there, inside, in  
a duck village—will they someday  
invite us to their duck dance?)  
All alone in sunlight, in snow,  
in fur.

—Gary Lawless, from Sitka Spring  
(BlackberryBooks, RR 1 Box 228, Nobleboro, ME)

the agency to carry out the following tasks:

- 1) Designate invasive plants (called "noxious weeds" by agricultural agencies). The law should specify that invasive plants that threaten natural plant communities are to be targeted, not just those that invade agricultural lands. The priority should be on exotic or alien species—those not native to that particular state. The federal program should focus on species alien to North America or outlying, vulnerable islands such as Hawai'i.

- 2) Outlaw sale or transport of the designated species and authorize seizure of shipments that violate the ban. The federal law should have two additional provisions: a) a ban on importation of any additional exotic plants unless they have been thoroughly evaluated and certified as non-invasive; b) a restriction on distribution of invasive plants already established in some parts of the country to prevent their being spread to other states.

- 3) Fund research into measures to prevent introduction and to control existing infestations. The control program should emphasize species-specific measures such as biological control. Legislators must ensure adequate funds to carry out this task.

Even before such a program is enacted, federal and state agencies that manage lands (including parks, forests, wildlife areas, and highway rights-of-way) should adopt a policy to control or eradicate invasive exotic plant

species on their lands. We must ask legislators to provide funds to carry out this policy.

—Faith Thompson Campbell, Natural Resources Defense Council, 1350 New York Ave NW, Washington, DC 20005

*science editor's note: The above article focuses on the East and Midwest. The situation warrants individual attention in the states plagued worst by exotics, particularly Florida, California, and Hawaii. Some additional invaders worth noting are these:*

- cheatgrass *Bromus tectorum*: a Eurasian immigrant introduced just after 1900, probably in contaminated wheat seeds; spread widely in over-grazed Western rangelands, particularly in the Intermountain Region, replacing native bunchgrasses

- spotted knapweed *Centaurea maculosa*: a Eurasian invader, one of several tumbleweed species; spreads along roadsides and invades rangelands, open forests, and agricultural areas in West

- water hyacinth *Eichhornia crassipes*: native to tropical America, invades water bodies in Florida; dense mats decompose and deplete oxygen in water

- Australian pine *Casuarina litorea*: escaped from cultivation in Florida, invades beaches and disturbed sites; virtually nothing grows under dense stands

—Reed Noss

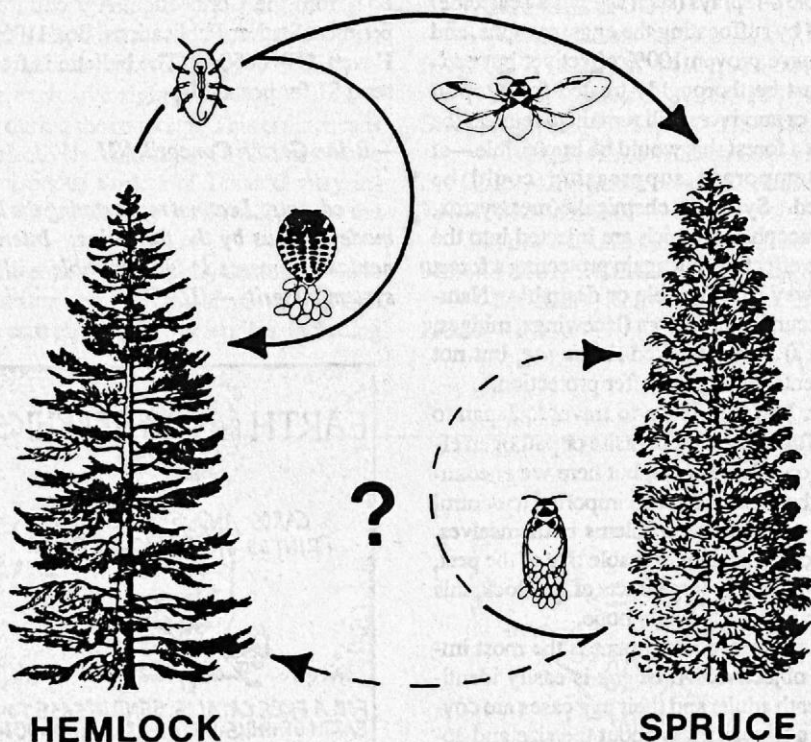
# Hemlock Woolly Adelgid Threatens Northeast

The effort to control the spread of alien species—so called “exotics”—into this country is invariably a story of confinement, damage control, and eradication attempts. This is the case developing with the Hemlock Woolly Adelgid, *Adelges tsugae*. The species has been in the eastern United States for some 35 years, and is now threatening the Eastern Hemlock (*Tsuga canadensis*) in the Northeast.

Low populations of *A. tsugae* exist in Japan and Formosa [Taiwan], but the source of the US infestation is uncertain. It has been found in the Pacific Northwest on Western Hemlock (*Tsuga heterophylla*), but apparently causes only incidental damage there. In the 1950s it was reported in Virginia and has since slowly spread both north and south. In 1985 Hurricane Gloria apparently carried it from Long Island, New York, to Rhode Island and Connecticut. Recent reports indicate it has reached Massachusetts (Springfield and Waltham) and it has turned up on nursery stock in Vermont. New Hampshire now has a quarantine on hemlock trees and raw wood; other states are likely to follow. However, the northward movement of *A. tsugae* may be unstoppable.

Little was known of the Hemlock Woolly Adelgid until Dr. Mark McClure of the Connecticut Agricultural Experiment Station in Windsor, CT, began research in the late 1980s. As thousands of hemlock have died in that state (a process that takes 1-4 years once a tree is infested) he has been collecting and analyzing information on the life cycle of *A. tsugae*.

Dr. McClure has proven that *A. tsugae* produces two generations a year, and is polymorphic, with spruce as an alternate host for the winged adult generation. The first active adelgids are the overwintering nymphs, called sistens, which have been generated parthenogenetically (non-sexually) and are all female. This ability, shared with other homopterous species, is a great advantage for reproduction under adverse conditions. The sistens mature and lay eggs from March until



May. The second generation, called progrediens, hatch and quickly pass through the same four nymphal stages as the sistens, laying their eggs in June or July. About 40 or 50 percent of the progrediens mature as winged adults, called sexupara. These migrate in search of spruce, the primary host for most adelgid species. Dr. McClure has monitored the sexupara on 12 different species of spruce (genus *Picea*), where they laid eggs. The resultant nymphs (called sexuales) did not survive on any of the *Picea* species observed (native and exotic), demonstrating that a suitable host for this part of *A. tsugae*'s life cycle wasn't found. Until *A. tsugae* adapts, or a spruce species proves suitable, the potential for winged migration is nil.

Unfortunately, the Woolly Adelgid can be spread by other means. Both sistens and progrediens lay their eggs in a sticky, cottony mass (thus the common name), distributed vertically throughout infested hemlock stands. Egg masses also are dislodged by wind and scattered onto neighboring trees, shrubs and the ground. Dr. McClure has studied the rôle

of wind, deer, and birds in distributing *A. tsugae* and its egg masses, and each has proven effective. Though hurricanes have long range potential, windborne distribution is mostly confined to an area within 300 meters of infested stands. Deer, in feeding on hemlock and moving through infested areas, pick up eggs and crawlers (the mobile nymphal stage) and distribute them to other hemlock. Birds also pick up eggs and crawlers both in the canopy and on the ground. Since *A. tsugae* is most active in cool weather and eggs are laid in early spring, migratory birds may be the most efficient long-range means of spreading the pest. Dr. McClure found 13 species carrying *A. tsugae*, and since both eggs and crawlers can live up to two weeks without food, the potential is clear.

Landscaping materials (nursery stock, bark mulch) and unprocessed logs from lumber operations may also allow a wide distribution of *A. tsugae*. Some of the largest wholesalers of nursery stock for the Northeast are located in Connecticut. A quarantine, such

*continued next page*



as New Hampshire has imposed, is an important step in checking the pest, but it must be accompanied by public education since unregulated traffic will certainly occur.

Controlling an infestation once it has started has proven very difficult. As would be expected, spraying is the first reaction. Diazinon and malathion have been used effectively, but are dangerous. Safer soap and emiscible oil sprays (such as Pratt's Scalecide) that kill by suffocating the eggs, nymphs, and adults have proven 100% effective; but each tree must be thoroughly treated from top to bottom or survivors will remain to reinfest the tree. In a forest this would be impossible—at most temporary suppression could be achieved. Systemic chemicals (metasystox, bidrin, acephate), which are injected into the tree, are effective, but again protecting a forest in this way isn't feasible or desirable. Naturally occurring predators (lacewings, midges, and flies) have attacked *A. tsugae*, but not consistently enough to offer protection.

Dr. McClure plans to travel to Japan to search for a predator, parasite or pathogen effective on a large scale, but here we encounter another issue: Exotics imported to control exotics can become problems in themselves. Still, faced with an inexorable tide of the pest, certain to destroy large tracts of hemlock, this solution may be the only hope.

At present, containment is the most important objective. *A. tsugae* is easily identified—both adults and their egg cases are covered in a fibrous mass about the size and ap-

pearance of a Q-tip. In a heavy infestation these will completely line the branchlets of any new growth on hemlock. These cases persist and can be found even after eggs have hatched, both on the tree and the ground beneath. If you encounter any tree you suspect is infested, immediately notify your state entomologist or county extension advisor. For more information contact these people, or request bulletin 851 from the Connecticut Agricultural Experiment Station, Publications, Box 1106, New Haven, CT 06504. (The bulletin is free, but send \$1 for postage.)

—Brian Carter, Concord, NH

*ed. note: I cannot resist stating the lesson made obvious by the foregoing: Intercontinental commerce is incompatible with ecosystem integrity.—JD*



## Heron Rookery in Maine Destroyed

Early this spring, Maine Fish & Game workers erected nesting platforms on trees in North Pond near Eliot, Maine, in hopes that the Great Blue Herons who have traditionally nested there will do so again. More than 25 large trees with lofty branches—the type the herons prefer—were chainsawed this past winter in an act of destruction linked to a dispute over property rights versus state conservation measures.

The rookery, until now Maine's eighth largest with over 70 breeding adults, made North Pond a focus of attention for conservationists and the Fish & Game Department. By state law, wetlands are protected with a 75 foot buffer zone, which may be extended to a 250 foot buffer if special sensitivity to disturbance

is evident. As a heron rookery is easily disrupted by human activity, it's likely such an extended zone would be declared. Much of the North Pond shoreline is already protected under conservation easements; but one property, owned by Fred and Toni Shultz, is not and these people have vigorously protested any attempts to regulate what they believe is their sole right to determine how their land is used. Despite the tax advantages of including their land in a protected zone, the Shultzes have obtained a building permit and intend to put up a rental house near the shore. Fred has stated he does not want to build there but must or lose control of the land. They've decided to develop the property before the opportunities are limited.

No one has been arrested for the tree felling, which carries a fine of \$17,000. Most disturbing is the prospect that backlashes against conservation measures could become common as debates pitting private interests against preservation of critical areas become more intense. (Witness the recent plowing of virgin prairie in Kansas.) This demonstrates again the spiraling value of habitat and individual species as they become more rare—a value not lost on those whose interest is monetary profits. The Shultzes might have settled for an exorbitant profit (as the landowner in Kansas could have); but a separate issue is the ideological heritage of our frontier past. Among some people, especially as government intrusion advances in other ways into our lives, the belief in the supreme rights of the individual are paramount.

—Brian Carter, New Hampshire

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## Herpetologists Protest Rattlesnake Roundup

About 150 protesters came to Sweetwater this March 9-10 to voice their concerns about rattlesnake roundups and the unregulated hide trade in Texas. Members of over 25 herpetological, environmental, and educational groups were on hand, including the North Texas, East Texas, and San Antonio Herpetological Societies; Northern Ohio Association of Herpetologists; Society for the Preservation of Reptiles and Amphibians; Reptile Defense Fund; an environmental education group from Trinity; and Earth First! groups from Austin, Lubbock, and Arizona.

Organizers had planned to have an educational display outside the coliseum featuring

15 different species of rattlesnakes, with informative talks by herpetologists. However, Sweetwater has a city ordinance that prohibits anyone from keeping any poisonous snake inside the city limits—except, of course, the Jaycees, who are named in the ordinance as having exclusive rights to keep poisonous snakes during the roundup. This ordinance is very selectively enforced. Organizers had a Non-poisonous Snakes of Texas display instead, which was very well received by the public.

The protest successfully demonstrated to Sweetwater and the rest of the world that people care about our wild reptiles, including

## Biodiversity Reports

Western Diamondback Rattlesnakes. Plans are under way for next year with a goal of 1500 demonstrators.

Please write or call:

- United States Jaycees Executive Office, POB 7, Tulsa, OK 74121; 918-584-2481
- Sweetwater Jaycees, 104 W 3rd, Sweetwater, TX 79556; 915-235-5488
- Texas Parks & Wildlife Dept. Executive Office, 4200 Smith School Rd, Austin, TX 78744; 512-389-4800

For more information contact Bob Sears, 915-743-2531, or Jim Seippel, 512-258-8584.

—Bob Sears, Rt. 2 Box 42, Wingate, TX 79566

## Mount Graham: Observatory Project Crumbles While Forest Falls

As summer's heat takes command in southern Arizona, the snow atop Mount Graham has finally melted and construction has begun again on the environmental disaster at its summit. Despite that, things are not going well for the Mt. Graham International Observatory project.

In early May, the Smithsonian Institution's board of regents voted to build their \$40 million, six-dish radio-telescope on Hawaii's Mauna Kea instead of on Mt. Graham. This decision removes one of the keystones of the project, as Smithsonian's involvement had brought an aura of respectability to a development effort most noted for violation and circumvention of the nation's environmental protection laws. Smithsonian representatives claimed that the decision was based solely on scientific grounds—viewing conditions on Mauna Kea are better—but unofficial reports give most of the credit to environmental activists and the storm of outrage directed at Smithsonian involvement in the project.

Activists in Ohio scored another victory when the Ohio State University regents de-

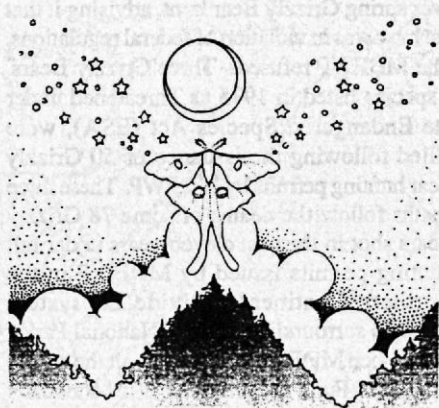
clared they would provide no further public funds for a planned Mt. Graham telescope. OSU astronomers are not barred from involvement in the project, but their chances of finding private funding for an OSU telescope are slim.

These two decisions (along with other defections in past years) leave the University of Arizona, sponsor of the project, as the sole remaining US partner. The remaining collaborators are Germany's Max Planck Institute, Italy's Arcetri Observatory, and the Vatican.

Meanwhile, the San Carlos Apache tribe has asked that the development be halted because it profanes the top of Mt. Graham, one of their most sacred sites.

Last fall, the U of A succeeded in constructing a new road to the mountain's summit and clearing the old-growth forest from several construction pads, overcoming legal challenges from the Sierra Club Legal Defense Fund and the constant presence of protesters (32 were arrested).

After several more court hearings during the winter, the U of A was restrained from



Jackie Taylor

doing further damage this spring until May 17, when the latest Temporary Restraining Order was lifted. Further appeals are planned, but destruction continues in the meantime.

Protesters are again on the mountain and the legal fight continues. **YOU CAN HELP!** As always, money is needed. (Send to: Arizona Earth First!, POB 3412, Tucson, AZ 85722.) At least as important, though, people should contact their local Catholic church and ask why the Vatican is spending Church money on the Mt. Graham project. For updates and more information on what to do, call the Mt. Graham Hotline: (602) 629-9200 (messages updated daily). For background information on the whole issue, write to the address above.

—Dale Turner, Tucson, AZ

# Grizzly Hunting in Montana

## Who's Enforcing the Endangered Species Act?

by Keith J. Hammer and Jasper Carlton

In April, the US Fish and Wildlife Service (FWS) asked Montana's Department of Fish, Wildlife, and Parks (MDFWP) to halt its first-ever spring Grizzly Bear hunt, advising it that the hunt was in violation of federal regulations. The MDFWP refused. Three Grizzly Bears, a species listed in 1975 as Threatened under the Endangered Species Act (ESA), were killed following the issuance of 50 Grizzly Bear hunting permits by MDFWP. These three deaths follow the deaths of some 78 Grizzly Bears shot in the past eleven years under fall hunting permits issued by MDFWP in the Northern Continental Divide Ecosystem (NCDE) surrounding Glacier National Park.

When MDFWP refused to halt the spring hunt, The Fund for Animals and Montana's Swan View Coalition filed suit in Montana State Court seeking a temporary restraining order against the State, to force it to end the hunt. In a bizarre series of events, however, the hearing for the temporary restraining order was not set until just four days before the month-long hunt was due to end, May 4, and the request was denied.

Pivotal in Judge Honzel's decision was the fact that the April 23 letter from FWS's Regional Office in Denver to MDFWP was issued as a request, not a clear order. Honzel called the FWS letter "one of the more wishy-washy things I've read in a long time," and concluded in his decision, "under the federal regulations, I suspect if it is an order, that Montana would have to comply with it."

Attorneys for Swan View and The Fund immediately asked the FWS and the US Department of Justice to "order" the State of Montana to halt the hunt. In a May 3 letter, the Justice Department concluded:

*The Department of Justice, nor for that matter the Department of Interior, has no authority under the Endangered Species Act (ESA) to issue such an order to Montana. However, if the State is in violation of the ESA, the Department of the Interior could request the Department of Justice to initiate a lawsuit for declaratory and injunctive relief to seek a court order compelling the State to stop the hunt. The Department of the Interior has not requested the Department of Justice to take such an action.*

In essence, the FWS agreed with the plaintiffs' concerns over the legality of the spring hunt and that is why it issued the April 23 letter to MDFWP. Nonetheless, the federal government stood by after two male Grizzly Bears had already been shot and allowed Montana to kill another male Grizzly after the state had been notified that the hunt was illegal! Citizens attempting to enforce the law and save the lives of a Threatened species were denied relief in court because the federal government was remiss and the citizens had not had time to file the prerequisite 60-day notice of intent to file suit under the ESA, in order to stop a 34-day hunt!

### PROVISIONS FOR HUNTING GRIZZLY BEARS

Under special rules, at 50 CFR 17.40, federal regulations allow for the limited sport hunting of Grizzly Bears in portions of the Northern Continental Divide Ecosystem provided that the total annual number of human-caused Grizzly Bear deaths in the ecosystem not exceed a certain number. Until 1985, the number allowed was 25. In 1985, however, the FWS issued an emergency rule reducing the allowable mortality to 21 "to ensure conservation of the species" in light of data being compiled for MDFWP's 1986 Programmatic EIS: The Grizzly Bear in Northwest Montana.

This supposedly sustainable mortality of

21 bears was calculated by applying a maximum sustainable mortality rate of 6% to the estimated number of Grizzly Bears (356) thought to exist in the NCDE outside Glacier National Park. Federal officials estimate that for every two Grizzly Bear deaths that become known, another death remains unknown. Hence, the annual allowable known human-caused mortality is 14. Moreover, the federal regulations recognize the importance of female Grizzly Bears within the population and require that no more than 6 of the 14 total be female.

Any hunting of Grizzly Bears has been allowed only in the fall, after the majority of other mortalities for the year have occurred and hopefully been accounted for. The fall hunt is allowed to proceed until the full quota is met ecosystem-wide or the female subquota is met for each of three Bear Management Areas (BMAs) into which the NCDE is divided.

In the past two years, the fall hunt in the Flathead BMA has been canceled because of excessive non-hunting mortality to female Grizzlies before the hunt was scheduled to begin. In 1990, the Flathead subquota of 2 female Grizzly mortalities was exceeded by 100% when four females died, three struck by Burlington Northern freight trains as they gathered to feed on grain spilled during previous derailments. MDFWP claims that it has never violated the mortality quota limits with its fall Grizzly Bear hunt.

### PROBLEMS WITH THE SPRING HUNT

The spring Grizzly Bear hunt of 1991, however, departed drastically from the fall hunt in its inability to insure that mortality quotas are not exceeded by uncontrollable factors occurring later in the year. The spring hunt was confined to the Rocky Mountain East Front BMA, and MDFWP argues that it was intended to target male Grizzly Bears during the period immediately following den emergence when females remain closer to their dens and are less vulnerable to hunting. MDFWP, however, set no quota on the total number of bears to be killed during the month-long hunt and would have apparently allowed up to 14 males to be taken. A subquota of 2 females was set, which represents two-thirds of the annual female subquota for the East Front BMA.

The Fund and Swan View pointed out that, according to mortality records for 1990, only 1 of the 14 Grizzly Bear deaths in the NCDE was a "legal" hunting mortality. If the

same number of uncontrollable non-hunting mortalities holds true for 1991, the 14 bear quota would be exceeded because of the 3 bears already killed under the spring hunt.

Apparently FWS Grizzly Bear Recovery Coordinator Chris Servheen had no problem with this added risk when he earlier gave MDFWP the go-ahead for the spring hunt and indicated that any excess mortality in one year could be compensated for in the following year. This is a notion, however, that attorneys for the FWS rejected as illegal.

## PROBLEMS WITH GRIZZLY BEAR HUNTING IN GENERAL

One problem with any hunting of the Grizzly Bear, a Threatened species, is that it is illegal. Section 9 of the ESA clearly prohibits the killing of any Threatened or Endangered species. The special rule allowing the hunting of Grizzly Bears in the NCDE is predicated on the assumption that such a regulated taking is warranted to relieve population pressures. The legal foundation for such

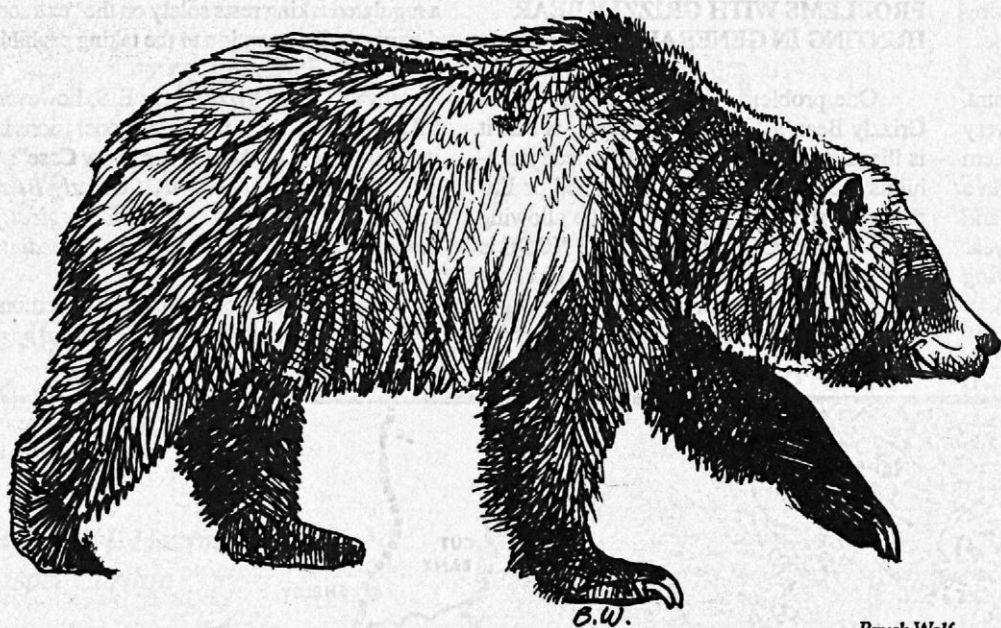
a regulated taking rests solely on the "extraordinary case" exemption to the taking prohibitions of the ESA.

In its 1986 Grizzly Bear EIS, however, MDFWP reaches the following conclusions in its "Discussion of the Extraordinary Case":

*It does not appear that Grizzly Bear population pressure ... can be biologically demonstrated at present or in the immediate future.*

In part because of its inability to demon-  
*continued next page*





Brush Wolf

strate that the "extraordinary case" exists, MDFWP has renewed its calls for the removal of the Grizzly Bear from the Threatened list. MDFWP claims that the Grizzly has "recovered" in the NCDE, a claim deserving close scrutiny.

Though it defies rational explanation, the 1982 Grizzly Bear Recovery Plan sets the recovery target for the NCDE at 560 bears, the mean number thought to already exist in 1980 (440-680). To make matters worse, the draft revised Recovery Plan released for public review in 1990 lowers the recovery target for the NCDE to 440 bears (200 inside Glacier National Park and 240 outside), the minimum estimated to exist in 1980. This leads to the unavoidable conclusion that, even if the NCDE population now meets recovery targets, there are likely fewer bears now than in 1980!

Interagency monitoring of Grizzly Bears in the NCDE indicates that the past three-year average count of Grizzly Bears outside Glacier National Park is at the bare minimum recovery threshold of 240 bears set forth in the revised Recovery Plan. This is 120 less than the number estimated to exist outside the Park in either 1980 or 1986! The revised Recovery Plan also calls for female Grizzlies with young to be sighted at least once every three years in at least 20 of 23 Bear Management Units (BMUs), but the past three years of monitoring indicate they have been sighted in only 18 BMUs.

Most relevant to this discussion of Grizzly mortality and hunting, an annual quota of 14 bear deaths is far above the level sustainable by only 240 bears outside Glacier Park. When the sustainable mortality rates applied to the 1986 estimate of 356 bears are applied to

the current estimate of 240 bears, as is done in the revised Recovery Plan, the "sustainable" quota drops to 9.5 known human-caused deaths.

## CONCLUSIONS

As a simple matter of law, Grizzly Bear hunting of any kind is illegal because it has not been demonstrated that the NCDE is subject to the "extraordinary case" where population pressures exist and cannot otherwise be relieved. Yet, in the past 11 years, 78 of 184 known Grizzly deaths (42%) in the NCDE were caused by "legal" hunting.

In light of current interagency monitoring, mortality quotas set under emergency rule in 1985 are excessive, whether they are met by hunting or non-hunting mortalities. And, as indicated by the FWS and its attorneys, current regulations simply don't allow for a spring hunt.

Accordingly, bear proponents are now taking legal actions. On 21 May 1991, Jasper Carlton of the Biodiversity Legal Foundation, and attorneys for Swan View Coalition and The Fund for Animals, filed a 60-day formal notice of intent to file suit, and petitioned the US Fish and Wildlife Service for enforcement of the Endangered Species Act against the Montana Fish and Game Commission and the Montana Department of Fish, Wildlife and Parks. The petition asked that criminal and civil penalties be applied against the Commission and Department for allowing the spring Grizzly Bear hunt to proceed after having been notified it was illegal under the ESA. The attorneys also requested that FWS immediately terminate its Section 6 Cooperative Wildlife Agreement

with the State of Montana and withhold all federal funds appropriated through its provisions.

These actions come none too soon. Over the past several years, Grizzly Bear hunting in Montana has been expanded from a limited fall hunt in the NCDE to include special "nuisance" Grizzly Bear hunts, first on the East Front and then on the west side of the Continental Divide. Now expansion of the hunting area is being considered and the spring hunt on the East Front has been undertaken. To add insult to injury, and pomposity to belligerence, MDFWP is calling for the mortality quotas imposed in 1985 to be returned to the earlier and higher level of 25 bears per year!

Meanwhile, the Grizzly Bear in the NCDE continues to lose ground as its habitat is drilled, logged, roaded, subdivided, and otherwise developed. In the face of all this, the federal govern-

ment and the State of Montana are attempting to fool the public into thinking the bear is no longer threatened with extinction by simply redefining "recovery" to mean fewer bears and less habitat.

Moreover, this whole numbers game, which we are forced to play by the federal and state agencies, obscures the real issues. *Ursus arctos horribilis*, one of the greatest omnivores ever to roam North America, is too important a part of the ecosystems in which it survives, and too noble a creature, to ever be shot—if we have any shred of an environmental ethic in this country.

The State of Montana has interfered with efforts to list the Woodland Caribou as Endangered in Montana, has refused to participate in recovery of the Gray Wolf unless it is removed from the Endangered species list, and now has apparently driven its spear into the ground in refusing to cooperate in managing the Threatened Grizzly Bear and calling for its delisting as well. The citizens of this country should be outraged and should insist that the FWS and Department of Justice put an end to the illegal hunting of Grizzly Bears in Montana.

**WHAT YOU CAN DO:** Write Montana Governor Stan Stevens, Capitol Station, Helena, MT 59620. Tell him you won't visit Montana or purchase any product made in Montana until the state has ended its Grizzly hunting seasons.

*Keith Hammer is a correspondent for Wild Earth and President of Swan View Coalition in Kalispell, MT.*

*Jasper Carlton is a Wild Earth correspondent and the Director of the Biodiversity Legal Foundation.*

# What Can Wilderness Do For Biodiversity?

by Reed F. Noss, Ph.D.

## ABSTRACT

*Biodiversity includes not only species, but also genes, communities, ecosystems, landscapes, regions, and biomes. Big wilderness, defined as very large, roadless, lightly managed areas, may better represent native biodiversity at more levels of organization than any other kind of protected area. At the genetic level, big wilderness supports multiple demes and heterozygosity and allelic diversity within demes. At the species level, viable populations of species ill-adapted to the humanized landscape are more likely to be maintained in big wilderness than in smaller or tamer areas. At the community or ecosystem level, the variety of habitats within big wilderness supports many different associations of species. Although each association might be protected separately in a system of smaller reserves, their functional combination at a higher level of organization is not protected. Only in large wilderness areas can native biodiversity be maintained at the landscape level, i.e., with the full spectrum of environmental gradients and habitats overlain by mosaics of disturbance-recovery patches.*

*Today, only 5 (2%) of 261 Bailey-Kuchler ecosystem types in the United States and Puerto Rico are represented in designated Wilderness in units of 1 million hectares (roughly 2.5 million acres) or more, all of these in Alaska. Only 50 (19%) of these ecosystem types are represented in units of at least 100,000 hectares (ha). These 50 ecosystem types comprise 101 of the 474 units of the National Wilderness Preservation System (or wilderness recommended; from Davis 1988). Almost all of these 50 types are in the Western states including Alaska, the 3 exceptions being in Minnesota, Georgia, and Florida—the Boundary Waters, Okefenokee Swamp, and Everglades. Of the remaining 211 ecosystem types, 104 are not represented at all in Wilderness and 107 are represented in Wilderness Areas smaller than 100,000 ha.*

*Wilderness areas smaller than some critical size must be actively managed to subsidize natural disturbance regimes and augment populations of space-demanding species. Broad linkages between wilderness areas may not fully compensate for inadequate size, but may help smaller areas remain viable.*

## INTRODUCTION

What can wilderness do for biodiversity? What can biodiversity do for wilderness? The relationship is reciprocal. Big wilderness, defined as very large, roadless, lightly managed areas (Foreman and Wolke 1989), can represent more levels of biological organization in better health than can smaller and more heavily modified areas. Biodiversity, as an environmental issue of enormous public and political interest, can infuse new vigor into the wilderness movement; provide scientifically valid justifications for protecting large, intact areas; and furnish ecologically meaningful criteria for Wilderness Area selection, design, and management. Although I agree in principle with the late Edward Abbey that "wilderness needs no defense, only more defenders," scientific selection and management criteria will help assure adequate representation and pro-

tection of biodiversity in wilderness and other public lands.

How useful are Wilderness Areas in the overall effort to protect biodiversity? In the conterminous 48 states, only about 1.8% of the land is designated Wilderness; the figure is 4% if we include Alaska (Watkins 1989). Most of the Earth's terrestrial biodiversity will be maintained, or fail to be maintained, in the "seminatural matrix" of multiple-use forest, range, and agricultural lands (Brown 1988). But for some species—those that do not get along well with humans and hence are often the most endangered—there is no substitute for big wilderness if they are to survive outside zoos. For native biodiversity at the landscape level of organization, which consists of gradients and mosaics of many community types, big wilderness is the only option. Wilderness

and biodiversity need each other.

In this paper, I explore the relationship between wilderness and biodiversity. First, I review recent concepts of biodiversity as encompassing multiple levels of biological organization, and discuss how wilderness areas contribute to conservation at each of these levels. Then, I discuss the importance of representation as a conservation criterion, and the role of big wilderness in representing the full spectrum of biodiversity. What is "big" depends on the ecosystem. In landscapes characterized by large, stand-replacing disturbances, such as fire in the Northern Rockies, big means millions of acres. Landscapes subject to smaller disturbances, such as Eastern deciduous forests, might be big at 50,000-100,000 acres. The scientific values of wilderness include opportunities for basic research and the "benchmark" functions (as natural reference, or "control," sites) discussed by Aldo Leopold but virtually ignored in modern wilderness debates. (In this article, 'wilderness' refers to both designated and un-protected roadless lands; but the discussion of representation pertains to designated Wilderness—the National Wilderness Preservation System, comprising roughly 35 million acres in the conterminous 48 states and 55 million acres in Alaska.)

## LEVELS OF BIODIVERSITY

Many people still equate biodiversity (short for biological diversity) with the number of species within a particular area. But the species is only one level of biological organization. Recent definitions of biodiversity converge on the view that biodiversity spans multiple levels of organization, from genes to biomes. The Office of Technology Assessment (1987) defined biological diversity as "the variety and variability among living organisms and the ecological complexes in which they occur," and discussed biodiversity at ecosystem, species, and genetic levels. The landscape level has been added by other authors (Noss 1990).

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At any level of organization, numbers alone do not encompass conservation concerns about biodiversity. It is not some maximum diversity of species or vegetation types that we wish to preserve within a wilderness area, but rather native species in naturally occurring patterns of abundance (Noss 1983; 1987a; Wilcove 1988). Composition, then, is as important as richness. Franklin and others (1981) pointed out that ecosystems in general can be characterized by three primary attributes: composition, structure, and function. All three attributes determine the biodiversity of an area, and all three are ordered hierarchically (Noss 1990). A comprehensive wilderness strategy must seek to maintain all of this complexity.

### THE GENETIC LEVEL

Genetic diversity includes within- and between-deme components. Within demes (semi-isolated local populations), a common conservation goal is to maintain high levels of heterozygosity and allelic diversity (variety of different forms of genes). Small, isolated populations tend to become inbred and fixed for a single allele at a large proportion of their loci. If these alleles are harmful recessives, inbreeding depression (evidenced by loss of viability and fecundity) may become evident. Genetic drift (random fluctuations in gene frequencies) in small populations can result in the loss of alleles and reduced potential for future evolutionary adaptation. Hence, we can expect that many small, isolated nature reserves will contain genetically impoverished populations with a high probability of extinction (Frankel and Soulé 1981; Schonewald-Cox 1983).

Local populations respond through directional selection to differences in habitat conditions, and different alleles often are favored in different demes. A deme is most likely to be genetically distinct when it is disjunct (isolated) or at the periphery of a species' range. There is a trade-off between maintaining genetic diversity within and between demes. Isolation promotes between-deme diversity, but typically reduces within-deme diversity. Allendorf (1983) suggested an ideal exchange rate among demes as one reproductively successful migrant individual per generation.

Large wilderness areas, especially when interconnected with other wilderness areas into regional networks, offer exemplary conditions for genetic conservation. If large enough—say, 1 million hectares (2.5 million acres) (Schonewald-Cox 1983)—an individual wilderness area and surrounding suitable habitat may contain populations of most species sizable enough to prevent inbreeding depression

**Five Bailey-Kuchler ecosystem types represented by 1 million hectares or more in the National Wilderness Preservation System (all 5 are in Alaska):**

<u>Ecoregion</u>	<u>Potential Natural Vegetation</u>	<u>Area Name</u>	<u>Size(ha)</u>
Pacific Forest	icefields	Wrangell-St. Elias	1,500,000
Brooks Range	cottonsedge tundra	Gates of the Arctic	1,213,400
Brooks Range	cottonsedge tundra	Noatak	1,174,000
Brooks Range	dryas meadows & barren	Arctic	2,188,865
Brooks Range	dryas meadows & barren	Gates of the Arctic	1,213,400

and genetic drift. For plants and small animals, a single wilderness area may contain multiple demes, some of which may be genetically distinct. For large, wide-ranging animals, such as Cougars and bears, a network of several large wilderness areas connected by broad habitat corridors might contain multiple demes and permit exchange of individuals among them. At present, such conditions rarely exist, due to habitat fragmentation. But enlargement of current Wilderness Areas; new designations of Wilderness, other reserves (National Parks, National Wildlife Refuges, etc.), and corridors; and more ecologically sensible management of surrounding lands may create acceptable conditions for genetic conservation of entire biotas (Noss 1987a).

### THE SPECIES LEVEL

The species level is most familiar to us, for the simple reason that species are more tangible than other levels of biological organization (except for the individual, which, animal liberation notwithstanding, usually is unimportant in conservation until a population has declined to an extremely small size). At the species level, the highest concern is maintaining total species diversity at a global scale and native species in natural patterns of abundance at a regional scale; local areas must be managed with this broader context in mind (Noss and Harris 1986). Due to human modifications of habitat and transportation (especially overseas transportation), exotic species and weedy native species now dominate many areas. Big wilderness is not exempt from these problems, but by definition has suffered fewer invasions than other areas. Roadlessness (or low accessibility to humans) is a key to

maintaining an intact native species composition. Roadlessness defines wilderness.

Population viability theory and practical experience have taught us that small populations are vulnerable to extinction for many reasons (Soulé 1987). Genetic deterioration represents one class of problems, as discussed above. For most small, wild populations, however, demographic stochasticity (i.e., random fluctuations in reproduction, mortality, and age and sex ratios) is probably a greater threat (Lande 1988). Chance variation in demographic parameters can drive a small population to extinction quite rapidly. For some species, there may be a threshold density or number of individuals below which the population cannot recover. This "Allee effect" (named after the animal ecologist W.C. Allee) is likely with organisms that modify their environment chemically or physically in a way that encourages their survival, with organisms for which group defense against predators or competitors is important, or with organisms for which social interactions and mating success depend on some critical population density (Lande 1988).

To the extent that a species depends on the conditions of wilderness, reductions in roadless area in a region predispose it to extinction. Wolves, Grizzly Bears, and to a lesser extent, Cougars, are among the species that may show wilderness dependency, primarily because they are shot or otherwise harassed in areas with high road density (e.g., Thiel 1985). A report by the Congressional Research Service on interagency management of the Greater Yellowstone Ecosystem concluded that road construction is the single greatest threat to the regional ecosystem (Keiter 1989). Because a large wilderness area with a natural

disturbance regime will maintain vulnerable species in addition to less sensitive species, the total *native* diversity of wilderness is expected to be higher than that of a roaded landscape of comparable size. Total species diversity may be higher in the roaded landscape, but many of those species will be exotics or other opportunists that were not a part of the primeval landscape and do not require protected areas for survival (Noss 1983; Wilcove 1988).

## THE COMMUNITY LEVEL

A community is a group of species that occupies a particular place. If we add soil, water, and ecological processes such as natural disturbance, we have an ecosystem. The scale of an ecosystem is arbitrary, and ranges from a microcosm in a jar of pond water to the entire biosphere. Terrestrial communities, or associations, are usually defined by their vegetation according to some standard of homogeneity and based on dominant and/or characteristic plant species (Mueller-Dombois and Ellenberg 1974). Animal communities, in turn, often are associated with particular plant communities, although habitat structure in many cases is more important than floristics (the plant species present).

Community-level conservation complements species-level protection. The Nature Conservancy, for example, employs a "coarse filter" by protecting high-quality examples of native community-types, as well as a "fine filter" aimed at particular rare species. The coarse filter is assumed to capture perhaps 85-90% of species without having to inventory or plan preserves for them individually (Noss 1987b).

In the short run, community-level conservation does not depend on wilderness, if one focuses mostly on plants. In practice, The Nature Conservancy, many state natural areas programs, and the Forest Service in its Research Natural Area (RNA) program, designate small preserves to protect what often are single representatives of community-types. It is acknowledged, sometimes, that such preserves will be missing many of their characteristic animals. Plants that depend on particular area-dependent animals for pollination or seed dispersal also will be lost from small preserves. Disturbance management is usually a problem (White and Bratton 1980). In many cases, small remnants were all that was left of a particular community-type. But in other cases, the "living museum" mentality simply supposed that small examples were all that was needed to save a particular kind of community for posterity (Noss and Harris 1986).

What big wilderness offers community-level conservation is an opportunity to main-

tain entire biological communities, fauna as well as flora. The fauna that can exist in large wilderness areas, but not small reserves, includes large predators, which may have important regulatory effects on community structure (Terborgh 1988). Also in large wilderness areas, communities are represented in their natural context, grading into other communities in the landscape mosaic (see below). Moreover, one problem with the coarse filter is that species assemblages are constantly changing over time as climate changes and species migrate at their characteristic rates (Hunter and others 1988). Interconnected networks of wilderness would supply the habitat diversity and dispersal corridors necessary for this re-sorting of species into new communities.

## THE LANDSCAPE LEVEL

Temperature, moisture, soil structure, and other aspects of the physical environment are gradient phenomena; they vary with elevation, aspect, latitude, and other continua. Each plant species responds to environmental gradients, being most abundant in the portion of a gradient that corresponds to its physiological optimum, and tailing off to either direction (assuming no competition or effects of herbivores, which will alter this relationship). Thus, in the Great Smoky Mountains, Whittaker (1956) was able to map the location of vegetation types in two dimensions along gradients of elevation (corresponding mostly to temperature) and moisture. Subsequent studies convinced Whittaker that plant species are distributed individually along gradients in accordance with their autecological tolerances and requirements. The diversity of a landscape is realized only when all environmental gradients and associated species distributions are represented fully.

Superimposed on the environmentally determined gradient-mosaic of vegetation is a mosaic created by disturbance, both natural and (increasingly) anthropogenic. Disturbances occur at multiple spatial and temporal scales, from frequent but small canopy gaps caused by treefalls, to wildfires that recur every few hundred years but cover thousands or millions of hectares. Disturbances at any scale break the dominance of established individuals or species, bring in a flush of resources such as sunlight and moisture, and promote regeneration and growth of new individuals. Disturbances are patchy in time and space, so that a landscape can be viewed as a "space-time mosaic" (Watt 1947) or "shifting-mosaic steady state" (Bormann and Likens 1979) of patches in various stages of recovery from disturbance. A major realization of modern

ecology is that moderate levels of disturbance enhance landscape complexity and species diversity (Pickett and White 1985). The native species in an area have adapted through evolution to a particular disturbance regime, which may not be mimicked effectively by anthropogenic disturbances.

Maintenance of landscape-level diversity (i.e., an "expanded coarse filter"; Noss 1987b) depends critically on the size of the landscape. A shifting-mosaic steady state simply does not occur in a small area where a single windstorm might flatten everything. Pickett and Thompson (1978) defined a "minimum dynamic area" as "the smallest area with a natural disturbance regime, which maintains internal recolonization sources, and hence minimizes extinction." In other words, the area is large enough that only a small portion is disturbed at any one time. Recently disturbed areas can be recolonized by species from nearby refugia. Shugart and West (1981) estimated that landscapes need to be 50-100 times larger than the largest disturbance in order to maintain a relative steady state of habitats. Thus, a small nature reserve can "incorporate" treefalls but not wildfires. Even Yellowstone National Park, at 898,000 ha (2.2 million acres) is too small to maintain a steady state with a natural fire regime (Romme and Knight 1982). The minimum dynamic area concept provides a strong argument for large reserves and helps tell us when management interventions are needed to regulate the disturbance regime in reserves that are too small.

The lesson here is that if we want to represent biodiversity at the landscape scale, with naturally occurring disturbances and without excessive management, we will need to set aside huge areas as intact, unfragmented land. Small wilderness areas are almost a contradiction in terms. As areas become smaller, more intensive management is necessary to maintain diversity (White and Bratton 1980). Unfortunately, management for habitat diversity in small areas usually benefits weedy, edge species at the expense of forest interior species (Noss 1983).

Big wilderness represents the only opportunity to maintain the ecological gradients and mosaics that constitute native biodiversity at the landscape level. Only in big wilderness can species and communities be studied and appreciated in their natural ecological and evolutionary context. This is not to suggest that we abandon our small wilderness areas and other reserves, which often contain important elements of biodiversity. But we must recognize that these small areas are inadequate for landscape-level conservation.

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## REPRESENTATION OF ECOSYSTEMS IN WILDERNESS AREAS

In the Fourth World Wilderness Conference, in 1987, delegates of 62 nations unanimously voted for a resolution to preserve "representative examples of all major ecosystems of the world to ensure the preservation of the full range of wilderness and biological diversity" (Davis 1988). This principle of representing ecosystems in reserves has a venerable history in the United States. In the 1920s, the Ecological Society of America's Committee on the Preservation of Natural Conditions for Ecological Study (which evolved into The Nature Conservancy) sought to represent all natural communities in protected areas (Shelford 1926). In 1933, the Ecological Society's Committee for the Study of Plant and Animal Communities defined three classes of nature sanctuaries, in respect to their adequacy as samples of pristine communities; the definitions were refined in 1950 as follows (Kendeigh and others 1950-51):

**First-class Nature Sanctuaries.** Fully protected areas, with virgin vegetation and of sufficient size to contain all the animal species in the self-maintaining populations historically known to have occurred in the area (except primitive man).

**Second-class Nature Sanctuaries.** Fully protected areas, with original vegetation more or less disturbed or fairly mature second-growth, with not more than two important animal species missing from the original fauna, or areas too small to insure maintenance of normal populations of the larger animals.

**Third-class Nature Sanctuaries.** Small areas inadequately protected or areas modified to a greater extent than those of the first and second classes.

These definitions provide a useful framework for determining which ecosystems, or more accurately which landscape-types, are represented adequately in protected areas. First-class nature sanctuaries correspond to big wilderness, as I have used the term here, and roughly to the level-8 reserves of Schonewald-Cox (1983).

Kendeigh and others (1950-51) noted that "for a community to be adequately represented, large virgin areas with balanced animal populations need to include not only undisturbed climax vegetation but also all important seral stages." Thus, Kendeigh and others anticipated modern conservation criteria based on population viability and minimum critical size for maintenance of ecosystems and landscape mosaics. They stressed the importance of spatial variation in community composition: "(R)epresentation must be repeated at intervals throughout the range covered by the commu-

nity, in order to include all variations induced by climate, topography, contact with other community types, age, influence of barriers, etc." Kendeigh and others placed particular emphasis on protecting areas big enough to support populations of large predators, because "(i)t is in the absence of the large predators that many sanctuaries are not entirely natural and have unbalanced populations of the various species." As noted by Schonewald-Cox (1983), it is doubtful whether any but the very largest existing reserves will sustain populations of large carnivores and ungulates in the long term.

In 1950, there were no first-class sanctuaries in true deciduous forest, prairie, or at the lower elevations in the Rocky Mountains. Opportunities for creating big wilderness areas in the United States and Canada were mostly limited to inaccessible southern swamps, boreal forests, higher elevations in the Western mountains, desert, and tundra (Kendeigh and others 1950-51).

How well have we succeeded in representing American ecosystems in designated Wilderness today, more than one-quarter century after passage of the Wilderness Act of 1964? Of 261 major terrestrial ecosystems recognized by a combination of Bailey's ecoregions and Kuchler's potential natural vegetation, 104 (40%) are not protected in the 36 million hectares (91 million acres), of the National Wilderness Preservation System (Davis 1988). In general, the most productive habitats have been appropriated for intensive human uses, leaving behind "rock and ice" as potential Wilderness (Foreman and Wolke 1989).

### THE SIZE ISSUE

Minimum area considerations, discussed by Kendeigh and others (1950-51) and elaborated in the recent conservation biology literature, suggest even more dismal conclusions about ecosystem representation in wilderness. As discussed above, ecosystems must be large (often over 1 million ha) in order to manage themselves with natural disturbances and maintain viable populations of large mammals.

If we apply Schonewald-Cox's (1983) criterion of 1 million ha as the size above which a protected area is relatively self-sustaining, only 5 ecosystem types (2% of the 261 Bailey-Kuchler ecosystems) in the United States and Puerto Rico are represented adequately in designated Wilderness, and all 5 of these are in Alaska. If we apply a less demanding criterion of 500,000 hectares, only 11 ecosystems (4%) are represented. Only 50 (19%) of the 261 Bailey-Kuchler ecosystems are represented in designated Wilderness Areas

in units at least 100,000 ha in size. Twenty-five (50%) of these 100,000-ha ecosystems (in 60 Wilderness Areas) are represented only in Alaska. Only 4 ecosystem types of 100,000 ha are found in Wilderness Areas east of the Rockies.

Protected areas tend to be small and inadequate representatives of the ecosystems they sample. Research Natural Areas (RNAs), which were designated specifically for their ecological and scientific values, are far too small to maintain natural processes. Ninety-three percent of Forest Service RNAs are smaller than 1000 ha, and the remaining 7% are less than 5000 ha. National Parks, although they contain some units comparable in size to the largest Wilderness Areas, also are dominated by small units. Wilderness Areas average larger, with most between 1000 and 100,000 ha. Only 12% are over 100,000 ha, however, and only 1% (6 areas) are larger than 1 million ha.

### SCIENTIFIC VALUES

Why should we care whether ecosystems are represented adequately in Wilderness Areas? Wilderness Areas, like National Parks, have been established more for their scenic and recreational values than for any ecological or scientific purposes (Nash 1984). The Wilderness Act specifies that scientific value may be part of the basis for Wilderness designation, but it is not mandatory or preeminent (Davis 1988). Scientists, such as Kendeigh et al. (1950-51) who emphasized ecological values of big wilderness, have lately been in the minority among wilderness advocates. Indeed, virtually all of the many National Forest management plans I have read justify (or fail to justify) wilderness purely in terms of Recreation Visitor Days (RVDs). The value of wilderness as a reservoir of biodiversity and natural processes is ignored, even though National Forest Management Act (NFMA) regulations require that forest managers, when evaluating the wilderness potential of their lands, consider proximity to other wilderness lands and potential effects on biodiversity (Keiter 1989).

We should know better. A scientist whom we consider the father of the modern wilderness movement was well aware of the ecological values of wilderness 50 years ago. Aldo Leopold spoke in recreational terms when he first advocated wilderness preservation in 1920; but by the mid-1930s, Leopold had matured as an ecologist (Meine 1988). Shortly thereafter, Leopold insisted that wilderness is vital to "the science of land-health," because it offers a "base-datum of normality, a picture of how healthy land maintains itself

as an organism" (Leopold 1941). Many ecologists have been interested in wilderness for its value in basic research on how nature works. Leopold suggested another function: that of a benchmark, against which we can compare managed and manipulated lands. In these times of massive experimentation with natural ecosystems, it would seem prudent to maintain control areas. Because our managed lands are landscapes, our control areas must also be at this scale—that is, big wilderness.

## CONCLUSION

Several levels of native biodiversity can be maintained most effectively in big wilderness. Moreover, wilderness areas have enormous scientific value as sites for basic ecological research and as benchmarks for comparison with managed lands. Yet, inventories show that currently designated Wilderness falls far short of representing the major ecosystems of the United States even as samples, much less as self-sustaining landscape mosaics with viable populations of large predators and their prey. Many conservationists throw up their hands and conclude that we cannot get much more than the scraps already designated as Wilderness. The likely outcome of proposals now before Congress is 4-6 million ha added to the current 36 million (Satchell 1989), far less than needed to achieve adequate representation of ecosystems and meet reasonable minimum-size criteria.

Should we accept the conclusion of no significant additions to the Wilderness System? Certainly not, though in the short-term, significant additions are unlikely. But designated Wilderness and ecological wilderness are not equivalent. Many lands can be managed for wilderness values, and in fact be restored to essentially wilderness condition, without formal designation. Other designations, such as biodiversity management areas, without the "big W" stigma could be promising. Road closures alone can be a significant avenue to recovery of wilderness values (Noss 1987a). Multiple-use lands, if managed to mimic natural disturbance regimes and protect sensitive species, may approximate many ecological values of big wilderness. As demonstrated by recent controversies over management of federal lands, however, most conservationists agree that significant changes in management direction, including a deemphasis on commodity production, must occur if public lands are to function as biodiversity reserves.

Although the current political outlook on wilderness designation is less than promising, additions to the Wilderness System should be pursued. New designations should concentrate on enlarging existing Wilderness Areas, con-

necting areas with broad habitat corridors, and protecting previously unrepresented ecosystem types. Designations should encompass centers of endemism and areas of high native species richness in each region (Scott and others 1991) and should include "wilderness recovery areas" for ecosystems where no existing sites meet strict Wilderness standards (Noss 1987a). If we want to have a Tallgrass Prairie Wilderness, for example, it will have to be restored. The guiding principle for selecting sites and drawing boundaries should be representation and long-term viability at multiple levels of organization—and, the bigger the better!

Wilderness managers and advocates also must overcome their aversion to active management. Most wilderness areas are far too small to manage themselves, particularly when stressed by over-visitation, air pollution, and global warming. To the degree that a wilderness area plus surrounding near-natural land is smaller than a minimum dynamic area (which, depending on the ecosystem type, may exceed 1 million ha), it will require active management to maintain natural levels of habitat diversity and viable populations of space-demanding species over time. Management of human activities to protect natural values is particularly needed. For smaller wilderness areas and other reserves, broad habitat linkages between sites may unite them into a functional network (Noss and Harris 1986), though such linkages may not compensate entirely for the small size of individual areas.

Finally, we need to put science back into the wilderness debate. Ecology and conservation biology provide guidelines for wilderness area selection, design, management, and restoration that are biased far less than the aesthetic and recreational arguments now dominating wilderness discussions. Science offers an appropriate "left-brain" complement to the ethical and spiritual reasons for wilderness preservation that attracted many of us to this business in the first place. We should not, however, count on science to provide a complete justification for wilderness preservation. That justification lies mainly in the value of wilderness as a refuge of sanity, humility, and reality in a deteriorating biosphere. Realizing this, we see most clearly that the present wilderness system is inadequate and that we desperately need one much bigger and better.

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# Loon Corp.'s Slippery Slope Proposal

## *A Controversy Fraught with Lessons*

by Cindy Hill

The Forest Supervisor for the White Mountain National Forest is climbing a mountain of public comments generated by the latest draft environmental impact statement issued for Loon Mountain Recreation Corporation's South Mountain ski area proposal. Loon Corp. calls the project an "expansion," but the additional capacity would in itself be the largest ski area in New Hampshire's White Mountains. The South Mountain ski area would cover 930 acres of public land; add 7600 skiers per day to new and expanded base facilities; draw 198 million gallons of water per year for snow-making; and necessitate clearcutting over 400 acres of public land for ski trails. On adjacent privately owned lands, condominiums and a golf course are planned.

The South Mountain proposal has been on the table since 1982, going through several rounds of environmental review under the National Environmental Policy Act (NEPA). Public participation and concern have increased with each round of review. As the Forest Service (FS) creeps nearer to issuing a final decision on the permit application, the thoughts of those opposing the project are focusing on devising the most effective appeal strategy should the permit be issued.

### LOON MOUNTAIN TODAY

Loon Corp.'s present operation on White Mountain National Forest (WMNF) lands in Lincoln, New Hampshire, is already a large ski area by New England standards. It covers a permit area of 785 acres, and has a capacity of almost 6000 skiers.

When the WMNF boundaries were drawn, a privately owned corridor was left

following the Kankamangus Highway and the East Branch of the Pemigewasset River as they wind away from Lincoln and the Interstate 93 interchange into the heart of the White Mountains. Loon Corp. has been steadily filling their part of the corridor with condominiums, stores, and parking spaces. In anticipation of approval of the South Mountain project, Loon has already cleared a large building site at the location of their planned base facilities, in the guise of constructing a trap and skeet shooting range—which was quickly closed due to the noise.

### SKI DEVELOPMENT & THE DEMISE OF LINCOLN

Ski area development in the eastern United States is actually little more than a real estate venture. The point of the ski area is to attract time share owners and townhouse investors, just like golf course retirement communities do in the South. Lincoln, New Hampshire, a former mill town, shows the pattern.

Loon Mountain Corporation received its ski area permit in 1965. In 1969 Loon expanded into East Basin. Loon's next expansion, in 1978, initiated the commercial growth of the area. The first condos came as a shock to Lincoln residents. After Loon's most recent expansion in 1983, development in Lincoln exploded. Like most small towns, Lincoln had been ill equipped to deal with the development pressure the ski area owners had created. Lincoln has thus involuntarily undergone metamorphosis from a quiet, sturdy New England community to a recreation service center dependent on monied Boston tourists for survival.

### THE NEPA PROCESS

Loon Corp.'s South Mountain project was initially proposed prior to the adoption of the White Mountain National Forest Land and



Patrick Dengate

Resource Management Plan of 1986. At the recommendation of the Forest Service, Loon withheld formal request for a permit until the Plan was released. The Plan included designation of South Mountain as a holding area for potential ski development, with the caveat that any proposal would have to go through environmental impact analysis. This holding designation process is suspect as it creates a monopoly whereby only existing ski area owners may expand or create a new ski area. When the next Forest Plan for the WMNF rolls around, this issue will undoubtedly be subject to public scrutiny by concerned citizens and by businesses shut out of the possibility for development in the holding area.

The Forest Service initiated scoping for the NEPA process on South Mountain in 1987, and issued the First Draft Environmental Impact Statement (EIS) in 1989. Hundreds of comments were made at public hearings held on the First Draft EIS, and 284 comment letters were received, a staggering amount of public input for a project of this nature. In contrast, a ski area permit regulation with national implications proposed in 1988 had generated nine comments nationwide.

About a year after issuing the First Draft EIS, the Forest Service released a Supplement which purported to address some of the flaws of the Draft, especially concerning water rights issues which had surfaced regarding both town and state water resources. The Supplement generated even more controversy.

The First Draft and its Supplement were scrapped. Early in 1991, a Revised Draft EIS was issued. The options presented are essentially minor variations within the same geographical area, designed to be precursors to the

largest proposal presented by Loon. The "no action" alternative is misleading as it contemplates massive development of adjacent privately held lands, and thus does not fulfill its function of providing a baseline for analysis.

The written comment period closed March 4. Three public hearings were held—in Lincoln, in the New Hampshire state capital of Concord, and in Boston (in response to requests by the Hub's environmental groups). The FS is now drafting responses to the hundreds of comments received. They anticipate issuing a Final EIS in August.

### KEY ISSUES OF CONCERN

The issues of concern over the South Mountain project range from philosophical to political. They include the impact of National Forest activities on the fate of a small New England town, and the role of National Forest lands in the East, where public lands are scarce and human pressures on the lands are intense.

Issues regarding water sources for snow-making and for condominiums range from questions of historical ownership of Loon Pond, a beautiful subalpine tarn atop the mountain, to methods of calculation for minimal flow requirements in the East Branch of the Pemigewasset River. Between stand questions about the federal anti-degradation policy for water quality in National Forests and adequacy of erosion control.

Wildlife issues also run the gamut from philosophical to technical, including habitat fragmentation and the ever-recurring problem of creating artificial "edge" habitat at the expense of forest interior species. Aquatic habitat issues are tied inextricably to the water withdrawal questions and erosion control, as well as to ski slope maintenance methods, which are usually based on chemical fertilizers and pesticides. (The hardest thing about ski area management, I am told by a local Massachusetts ski area owner, is keeping the ski slopes firmly attached to the mountainside. Without intensive "turf management," it seems the slopes have a nasty tendency to slide downhill.)

Endangered species questions concern lost opportunities for reintroduction, as well as direct and cumulative impacts. For example, the WMNF Plan discusses the inten-

tion to reintroduce the extirpated Sunapee Trout, a state listed endangered species. Loon Pond is one of two lakes in New Hampshire with the specific habitat needed for this reintroduction. The opportunity cost of using Loon Pond for snow-making, and possibly for a put and catch fishery, is not even mentioned in the EIS documents.

Other wildlife issues are characterized by an obvious lack of information. The project site is near several small brooks, none of which has been assessed for vertebrate or invertebrate populations. One unnamed stream is mapped as intermittent even though it has been observed to be running at dry times of the year. The project proposal appears to plow this dotted blue line under one of the ski slopes.

Impacts of snow-making drawdown on insects, and as a result, on insect eating species like warblers, have not been considered. Plants have been ignored; a rare plant survey has not been done.

### CONSERVATIONISTS' STRATEGIES

Rather than assuage the concerns of wildlife advocates, the prolonged EIS process has permitted an increasingly sophisticated opposition to arise. Formal written and oral comments were presented by individual activists and organizations ranging in size and concerns from the Lincoln Concerned Citizens Coalition, to Preserve Appalachian Wilderness (see PAW article this issue), to the Sierra Club and The Wilderness Society. Usually, the environmental review process happens in such a short time frame that concerned people have little choice but to respond shooting from the hip—addressing the issues that jump out from the documents after a quick read, without time for thought about future ramifications of comments submitted.

Preserve Appalachian Wilderness decided prior to the last round of public hearings to appeal any Forest Service decision to permit any alternative outside the existing permit area. The chance to make this decision prior to submitting comments allowed PAW to consider how the comments would create a record for appeal. Deciding in advance to appeal is not always the the best course: It is important to weigh going all out to stop a project at its initial review level, against dedicating valuable time, money, and expertise to setting the stage for appeal. In this case, wilderness advocates never faced this either-or choice because widespread public attention ensured that a large portion of comments submitted would be aimed at the immediate review without looking ahead to possible appeal.

In administrative procedures, questions

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that may be raised on appeal are frequently limited to issues raised in the original proceedings. For example, if no one raised the question of Sunapee Trout restoration in the public comments, courts would not allow it to be raised on appeal. This is because agencies make their decisions based on the "record" in

front of them, and the question for appeal is whether or not their decision is supported by the information on that record.

Thus, if appeal is a possibility, it is always crucial to raise numerous issues in a coordinated fashion early in the process. One approach is to "laundry list" the issues presented to preserve them for appeal.

Another consideration is that decisions are usually overturned on the basis that some aspect of the decision violates the Forest Plan, agency regulations, Council on Environmental Quality (CEQ) regulations, or NEPA. In anticipation of appeal, PAW took the approach of reading one by one through the administrative requirements, then looking back at the EIS documents to see whether those requirements were met.

Examples of failures in the EIS revealed this way are violation of the CEQ requirement that scientific methodologies be spelled out (among other instances, the "skier demand" study methods were never revealed), and a lack of compliance with FS visual design guidelines. These issues may not have been considered after reading the EIS documents alone, but came to light through the back-door approach of starting with the regulations.

On a project as big and complex as the proposed ski area expansion, no one person can find all the possible issues, legal or scientific—and many projects are far larger and more complex. Dividing up commenting among several people by areas of interest or different disciplinary approaches increases the efficiency and professionalism of comments and the likelihood of successful opposition.

Where funding is available to employ lawyers, biologists, cartographers, and the like for analysis of EIS documents, a complete set of comments is possible. Otherwise, creativity can replace professional staff. PAW is lucky in this respect to be a diverse network including professionals in the fields of environmental law and aquatic ecology.

In the spirit of progressive education and learning by doing, I assigned my undergraduate paralegal environmental law class the project of commenting on the Loon Draft EIS. With a combined motive of making the assignment meaningful and allowing a wide range of issues to be addressed, I divided the fields for comment into categories, with each student looking at something like "wildlife" or "visual impact." The results were impressive, and nearly all of the students actually submitted their comments.

I then required the students to presume the proposal had been permitted; each had drafted a formal appeal in their assigned area of concern. Several students are threatening to submit their appeals should the project be

permitted; others have volunteered the use of their information within the PAW appeal. The benefits to both my students and the efforts to block the expansion have been extraordinary.

A final strategy has been to exchange information with other concerned parties throughout the proceedings, even some not in total accord with the goal of protecting wilderness and wildlife. Others may reveal concerns you have simply missed, or have access to expertise you lack. Where others' comments will be at odds with your own, prior communications may allow you to counter their position in your comments. Otherwise, you will not see what they said until after the public comments have been released with the Final EIS.

Throughout the commenting process, most of the active organizations shared their concerns and strategies. Where appeal is anticipated, as it is here, contact must be maintained between the time the comment period closes and the time the Final EIS is released. Frequently, organizations that do not have the resources to mount an effective appeal alone will wait to see what other groups plan to appeal.

Since PAW has announced its intent to appeal an adverse decision, other groups have had a point of focus to work on their own appeals. Individuals, groups, and agencies have forwarded copies of comments they submitted and suggestions for appeal to the PAW legal offices.

## CONCLUSION

The South Mountain ski area proposal has become a forum for both site-specific and regional concerns over the role of National Forest land in the East. Concerned public participation in the NEPA process has forced more detailed review and slowed down the procedures. This has had both an immediate benefit, in forcing the release of more information prior to the decision; and a long-term benefit, in enabling groups like PAW to prepare ahead for administrative and legal appeals should the FS allow the ski area permit.

The information generated by the protracted environmental review, and the communication networks and alliances forged in fighting the South Mountain project, will have lasting implications for the future of public lands management in the Northeast. Future development proposals and the next White Mountain National Forest Plan will be met by a more skilled, practised, and coordinated network of wildlife and wilderness activists.

*Cindy Hill is an environmental attorney, teacher, poet, artist, and PAW leader. She contributes regularly to our pages.*

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Public Media Center

# Officials Discuss the Killing of the Coasts

by Ron Huber

Bad news from the National Symposium on Coastal Fish Habitat Conservation: Every coastal aquatic ecosystem in North America is either on the ropes or headed there fast.

The word from the three dozen private and government scientists and fisheries activists from around the United States who attended the March 7-9 conference in Baltimore, Maryland, was grim: From San Francisco Bay to Chesapeake Bay, Penobscot Bay to the Gulf of Mexico, the same human predation, pollution, and destruction of spawning and living areas is pushing wild populations down at an unprecedented rate. Some examples:

## NEW ENGLAND

Victims of overkill by both sport and commercial fisheries, Atlantic Salmon that run those gauntlets may possess damaged or deformed reproductive organs from exposure to the toxic stew in Narragansett Bay, Boston Harbor, Casco Bay, Salem Harbor and Penobscot Bay, according to Terry Haines of the National Fisheries Contaminant Research Center.

Many spawning areas have vanished behind dams. Fish that negotiate fish ladders arrive in a reservoir lacking a current, with no clue as to the which way is "upstream." Eggs that survive toxic shock from pesticides, herbicides and other agro-pollutants hatch larvae into heated, silted water devoid of prey. High acid levels in lakes from acid rain along with these contaminants are killing many plankton species vital to the food web and to controlling lake clarity and temperature.

## SAN FRANCISCO BAY

Diversion of water to feed agribusiness in the Central Valley of California has upset the brackish water balance of the San Francisco Bay-Delta Estuary. James Chambers, fishery biologist for the National Oceanographic and Atmospheric Administration, called this the most vital and important estuary

on the West Coast of North and South America. Sixty percent of San Francisco Bay's freshwater supply has been re-routed via the federal Central Valley Project and the State Water Project, despite findings by the international scientific community that diversion of more than 30% of any estuary's freshwater flow has disastrous effects on its inhabitants. The brackish waters of Grizzly Bay, Honker Bay and Siusun Bay (within the greater San Francisco Bay estuary) no longer receive enough freshwater to maintain the balance of fresh and salt water necessary to sustain estuarine life.

The great runs of hundreds of thousands of Chinook Salmon up the San Joaquin River have been destroyed utterly by damming and water diversion. Those of the Sacramento River barely survive: fewer than 500 salmon made the run in 1990, down from 120,000 in 1970. The US Secretary of Commerce has been forced to list the Sacramento winter-run Chinook as Threatened under the Endangered Species Act. Attempts to force governments to abide by the Clean Water Act or the National Environmental Policy Act are consistently being thwarted by agribusiness.

The Bureau of Reclamation is taking water from Shasta, Trinity and Whiskeytown Reservoirs to supply agricultural water contractors in the Central Valley, many of whom are using the water to grow surplus crops of rice and cotton to get their federal subsidies! The Pacific Coast Federation of Fishermen's Associations recently warned that the remaining shallow water in the reservoirs will

be warmed by the summer sun so that the Sacramento River will be heated to 75 degrees Fahrenheit by August, destroying surviving remnants of winter run Chinook.

## GULF OF MEXICO

The human population is expected to increase 46% in the next 20 years on the Gulf Coast. Dredging and filling of salt marshes and mangrove swamps have eliminated nursery habitat and feeding grounds for shrimp, crabs, fish, and birds, according to Gene Turner of Louisiana State University's Center for Wetland Resources.

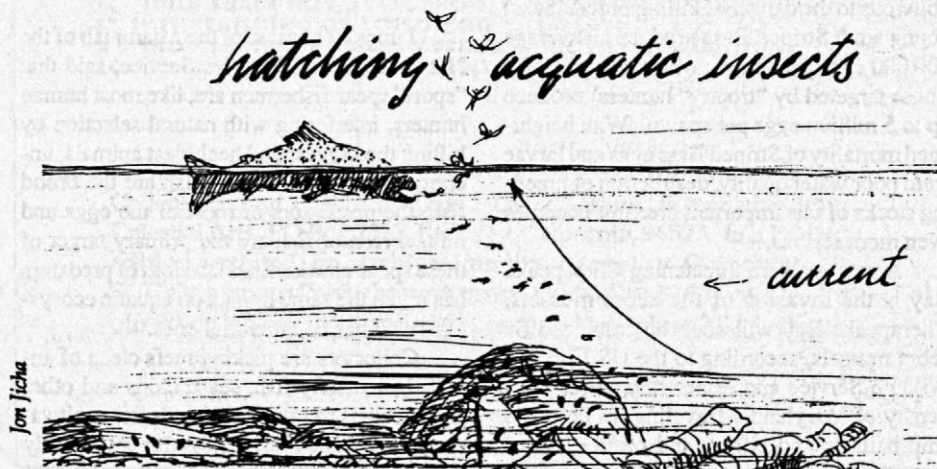
Water diversion and channeling of the Mississippi River is changing the Mississippi Delta, bringing saltwater into freshwater habitats and drowning marshes. The Bureau of Reclamation is bandying about a proposal to divert "some" of the Mississippi River to southern California!

So many toxic substances are buried in Galveston Bay that a Navy project to enlarge a disposal site created by the Corps of Engineers there had to be abandoned for fear of resuspending the toxics.

Shrimp trawlers are emptying the Gulf of turtles and fish. Estimates are that ten pounds of fish are killed for every pound of shrimp caught. This adds up to about 2.5 billion Red Snapper, Croaker, Spot, Sea Trout, King and Spanish Mackerel, Red Drum and sharks per year!

Also being exterminated by the shrimp nets are rays, sponges and crabs. Excluder devices to allow escape of turtles and fish from shrimp nets have been mandated for use but the US government cannot enforce its own laws, thanks to Senator John Breaux of Louisiana, who added an amendment to the

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Jon Jicha

reauthorized Magnuson Fisheries Conservation and Management Act that prohibits regulation of shrimp "bycatch" until 1994. Moreover, altered marshlands along the Gulf coasts no longer provide spawning habitat for Penaeid Shrimp (the commercially desirable species) and other organisms.

## CHESAPEAKE BAY

Paul Rago of the US Fish and Wildlife Service (FWS) said that the largest estuary in North America is falling victim to the same assaults as other bays: colonization of critical habitat areas by *Homo sapiens*, siltation of spawning areas, releases of toxic chemicals into the water, overfishing, acid rain, dams ...

Waterfront properties have transformed much of the Chesapeake's shoreline habitat into impassable bulwarks of stone, wood and metal. Construction projects within the watershed destroy tree cover, warming streams to intolerable levels. Silt runoff abrades the gills of fish, and buries gravel beds essential to spawning.

As soils are disturbed in the Chesapeake's central watershed, sulfuric acid is released from naturally acid-bearing subsoils. This, in conjunction with aluminum and other metals dissolved from the soil by the acid, kills fish eggs and larvae, many of whom are already stressed by acid rain. (Locally, rains have been recorded as low as 3.23 on the pH scale.)

Since 1970 there have been no strong year classes of Striped Bass. ("Year class" is a biologist's term for the number of fish of a particular species estimated to have survived their first year of life in a particular ecosystem.) Drift-netters, charter boats and "sport" fishermen all are demanding from an acquiescent Maryland Department of Natural Resources (DNR) a "fair share" of the remaining schools of Striped Bass.

The DNR will allow the killing of "trophy" Striped Bass (mature adult fish of 3 feet in length or greater), from May 11 through 27, oblivious to the danger of killing broodstocks: young adult Striped Bass produce an average 500,000 eggs per spawn, while mature adults (those targeted by "trophy" hunters) produce up to 5 million eggs per spawn. With heightened mortality of Striped Bass eggs and larvae from poor water quality, destruction of breeding stocks of this important predator becomes even more serious.

A new problem threatening Chesapeake Bay is the invasion of the zebra mussels. Chesapeake Bay will soon be colonized by zebra mussels, according to the US Fish and Wildlife Service and researchers at the University of Maryland. Traveling inside cargo ship ballasts and bilges, and on the feet of

ducks and other waterfowl, the alien mussels [native to Asia] are known to be present in the Erie Canal—within striking distance of the Chesapeake Bay watershed. Scientific opinion is divided over how well they will adapt to brackish waters, with Soviet studies said to show their adaptability to waters as brackish as the upper and mid-Chesapeake, as far south as the mouth of the Potomac River.

Should the zebra mussel successfully colonize the Chesapeake, this important estuary's biota will undergo drastic changes, as oysters, razor clams, softshell clams and hard clams succumb like Great Lakes molluscs to the suffocating effects of being covered with layer after layer of these prolific bivalves, which apparently have no predators in American waters. Changes to plankton populations may result in changes in water clarity and temperature.

Calvert Cliffs nuclear power plant will have its intakes clogged as will various other Bay water user industries. The mussels will presumably spread into the Bay's tributaries, fouling sewage and power plants. The known methods of dealing with pipe fouling are flushing with chlorine and frequent reaming of water pipes. Chlorine is toxic to aquatic life.

A ban on importing zebra mussels for any purpose, including research, has been belatedly imposed by the Maryland DNR. The outlook is bleak: cargo ships travel from Great Lakes waters infested with zebra mussels to the Chesapeake regularly, with a high probability of zebra mussel larvae in ballast and bilge water. Migratory waterfowl may transport mussel larvae into the upper headwaters of the Susquehanna River, from where the rapidly reproducing filter-feeders will work their way down, soon wreaking havoc on the Bay.

Delaware Bay is connected by a sea level canal to Chesapeake Bay and will probably fall victim to the zebra mussel as well. The outlook for the Ohio River drainage is equally poor.

## FLORIDA

James Bohnsack, of the Miami lab of the National Marine Fisheries Service, said that "sport" spear-fishermen are, like most human hunters, interfering with natural selection by killing the biggest and healthiest animals, unconcerned that the largest fish are the brood fish, the possessors of most of the eggs and milt. Predator fish are the primary target of these spear-chuckers, and the loss of predators has much the same impact on aquatic ecosystems as it has on terrestrial ones.

Collectors are picking reefs clean of angelfish, butterfly fish, sea urchins and other reef dwellers to satisfy demands from saltwater aquaria. The Florida government recently

created "restrictions" limiting angelfish hunters to "only" 75 angelfish a day or 150 a boat, and butterfly fish hunters to 75 a day per boat. Collectors' anchors have been tearing up the reefs as well. Even hand or flipper contact with living coral can kill the delicate organisms.

Mark Fonseca, fisheries ecologist for the National Marine Fisheries Service (NMFS), warned that seagrass meadows, which the US Army Corps of Engineers claims are not protected by the Clean Water Act, are being ripped to shreds by pleasure boaters and jet-ski riders. (Seagrasses are photosynthetic flowering plants that long ago returned to the sea.) Florida's millions of acres of seagrass support large populations of juvenile crabs, shrimp, scallops, and clams. One NMFS study found an average of 30 shrimp, 60 crabs and 40 fish per cubic meter of seagrass along the Florida Gulf Coast.

Many seagrasses grow at depths of up to 150 feet. Silted over after human waterfront development and deprived of light by reduced water clarity, their habitats are shrinking fast.

Despite the importance of seagrasses in maintaining the coastal ecosystem, they are not listed in wetland inventories. Seagrasses grow very slowly, especially in the turbid water presently considered acceptable by the Florida government. Fonseca warned that "mitigation," the replacement of wild ecosystems with artificial ones, has conspicuously failed in the case of seagrasses. Until water clarity is improved from the 1% transparency level now considered adequate by Florida to at least 25%, most seagrasses will not grow. Although the number of individual animals present in successfully transplanted shallow beds is similar to that of wild seagrass meadows, the number of species is far less.

## OFFICIAL RESPONSES

The federal government doesn't take its coastal zone agencies seriously. The budget for NMFS, EPA, and FWS work on coastal zone protection is smaller than that for the military's marching bands!

The Army Corps of Engineers has traditionally been recognized by other agencies as the lead federal agency for coastal habitat protection. As history has shown, however, the Corps is actually the lead federal agency for coastal habitat destruction. Political appointees heading other federal agencies also frequently thwart attempts by lower echelon managers to protect coastal ecosystems. There is a communications gap between politicians and government scientists, who fear loss of job security if they are outspoken. Private biologists too, relying year to year on government grants, end up moderating their views to keep on the gravy train.

Scientist after scientist at the symposium had well-researched horror stories about their particular elements of coastal habitat. But when it came down to solutions, there was uncertainty, confusion, anger and disbelief at how things have degenerated so quickly, particularly since 1980.

We need money—more research! This was the universal lament; and there is some truth in it, but more important, they called for translators: persons to rewrite the scientists' dry findings for the general public.

These persons should then publicize this information through all media outlets—press releases, talk shows, articles, documentaries, stories for morning radio patter. Make it clear, graphic and simple, participants suggested, but do it now! One will find the media far more receptive to such stories than expected, especially newspaper columnists, who must come up with something new to beef about daily.

One biologist said publicizing the plight of well-known species may get the point across better than ecosystem warnings. "Save the Littoral Zone!" does not raise as much interest as "Save the Sea Turtles!"

Another warned against falling into the trap of setting monetary values on coastal habitat, as any developer worth his dozers can cite a higher money value on his proposed development. Habitat is priceless!

#### WHAT YOU CAN DO

Get on the Corps mailing list and find out where coastal wetlands destruction is planned in your area. Ask your state fisheries agency for the status of local fish and coastal wildlife. Call local biocrats and get to know them.

Demand public hearings, then attend them; savage developers in the press; stop dozers from flattening coastal forests. Explore the coast, the water, the beaches; visit the docks. See what is actually being brought to shore on the fishing boats and what is being left floating belly up in the water.

Talk with local biologists at public and private labs. They're usually happy to meet activists interested in protecting the fragile, complex ecosystems they are studying. If they don't have the answers to your questions, they'll usually steer you to the appropriate person.

Go to fishermen's bars and cafés and get to know these folks. They may be unlettered, but chances are they know more about the state of their local aquatic ecosystem than biologists and regulators.

Send information on coastal habitat destruction and biocidal aquatic wildlife management practices to the new coastal ecodefense journal, *EARTHSEA*, POB 184, Chesapeake Beach, MD 20732.

# EARTH'S



## TEN COMMANDMENTS



- I THOU SHALT LOVE AND HONOR THE EARTH FOR IT BLESSES THY LIFE AND GOVERNS THY SURVIVAL.
- II THOU SHALT KEEP EACH DAY SACRED TO THE EARTH AND CELEBRATE THE TURNING OF ITS SEASONS.
- III THOU SHALT NOT HOLD THYSELF ABOVE OTHER LIVING THINGS NOR DRIVE THEM TO EXTINCTION.
- IV THOU SHALT GIVE THANKS FOR THY FOOD TO THE CREATURES AND PLANTS THAT NOURISH THEE.
- V THOU SHALT LIMIT THY OFFSPRING FOR MULTITUDES OF PEOPLE ARE A BURDEN UNTO THE EARTH.
- VI THOU SHALT NOT KILL NOR WASTE EARTH'S RICHES UPON WEAPONS OF WAR.
- VII THOU SHALT NOT PURSUE PROFIT AT THE EARTH'S EXPENSE BUT STRIVE TO RESTORE ITS DAMAGED MAJESTY.
- VIII THOU SHALT NOT HIDE FROM THYSELF OR OTHERS THE CONSEQUENCES OF THY ACTIONS UPON THE EARTH.
- IX THOU SHALT NOT STEAL FROM FUTURE GENERATIONS BY IMPOVERISHING OR POISONING THE EARTH.
- X THOU SHALT CONSUME MATERIAL GOODS IN MODERATION SO ALL MAY SHARE EARTH'S BOUNTY.

*EARTH'S TEN COMMANDMENTS*, a poster with text by Ernest Callenbach and design by David Lance Goines, is available from Celestial Arts, PO Box 7327, Berkeley, California, 94707. In a limited edition, printed on archival quality paper by Goines at his St. Heironymous Press, the poster costs \$25.00 plus \$2.00 postage. An offset version on 50% recycled paper costs \$3.95 plus \$2.00 postage.



# Oregon or Bust ...

Eugene, Oregon: I sit in a room crowded by environmental lawyers, wanna-be's and other eco-crusaders. We discuss the federal government's track record regarding the regulation of 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) and similar toxic compounds known as dioxins. Oregon is in the initial throes of spring; what we Southerners call a "tulip tree" blooms beyond the pale walls of the seminar. The ground is drizzle-soaked. This morning I noticed snow on a nearby peak.

Sojourners from around the US are here. They mean well; they have that "look": serious and determined. Some wander about, surveying the assorted paraphernalia associated with environmental conferences. A group calling itself "Earth First!" sells cheesecake and cookies. Like the majority of folks here, one of the vendors at this table wears a name tag. Hers says: Nameless Media Slut. My tag announces who I am: Dr. Dioxin. I am on the toxic trail, tracking down the effects of TCDD on America's ecosystems.

As reported in Wild Earth Spring 1991, dioxin pervades America's water resources. It is an unwanted byproduct produced during the manufacture of bleached paper, and other industrial activities. Paper mills spew dioxin into the nation's creeks and rivers, where it enters aquatic communities. Dioxin does not discriminate; it takes residence in many species. In fact, you, the readers of this periodical, are exposed. The average background dose for the US populace is between 7 and 20 parts per trillion in blood serum. Dioxin is extremely toxic and has a half-life in human tissue of somewhere around ten years. Dioxin has been discovered in numerous paper products ... including milk cartons.

These temporary Oregonians seek to determine what we, the people, can do to rid ourselves of this noxious chemical. The EPA is involved. So are states hosting the pulp and paper industry, and even the FDA. But it is the folks on the ground who are turning the tide ... slowly, while dioxin bioaccumulates in America's aquatic critters.

Some interesting things about dioxin:

- Dioxin is a nickname for 75 related chemicals with varying toxicity—2,3,7,8 TCDD being the most noxious.
- Dioxin is suspected of further endangering America's symbol, the Bald Eagle.

It accomplishes this via teratogenic action; it prevents eagle eggs from coming to fruition.

- Dioxin is believed to cause lesions and sores on various fish species. Symptoms noted in salmon include skin discoloration, fin necrosis, destruction of caudal fins, fungal growths, and erosion of the upper jaw. Rainbow Trout have been observed withering away after repeated exposure to dioxin.

- In animals, dioxin has been associated with reproductive, mutagenic, histopathologic, and immunotoxic effects. Dioxin produces prominent chloracne skin lesions in humans and monkeys, edema formation in birds, severe liver damage in rats and rabbits. Other reactions to exposure include hypophagia (reduced desire for food); increased frequency of stillbirths; teratogenic symptoms such as cleft palate, spinal column deformities, and cystic kidneys; nail loss; depression in plasma testosterone concentration; gastric ulcers; and lung lesions.

- Perhaps worst of all, reduced reproductive success is documented in pulmonate snails and oligochaete worms.

- The pulp and paper industry, in concert with an umbrella entity known as the American Paper Institute, has spent countless dollars and hours in an effort to assuage America's fears about dioxins.

Nonetheless, the Oregon group wants to end the production of dioxin. They discuss various strategies to compel the government to regulate organochlorines out of existence. They assert that the marketplace is "our" greatest tool; if only Americans would demand unbleached paper ... but dioxin is coming from many places ... perhaps from a municipal incinerator near you.

Greenpeace is here. They have led the charge against the discharge of organochlorines into the nation's waters. The Environmental Defense Fund and NRDC are present. SCDLF fields questions on the Clean Water Act.

After endless hours of "networking," I decide to cruise the beach. In my rental car, I take an unmarked dirt road through the Siuslaw National Forest, along the Alsea River, and finally to the Pacific. It is dusk; a crimson orb is sinking into the turbulent ocean. Huge rocks dot the coast. I pull over and stroll along shore. A crisp wind blows salt spray at me. This is the final repository for numerous

## On The Toxic Trail With Dr. Dioxin

cogener of dioxin. Fortunately, here the stuff is invisible and diluted to the point of obscurity.

The good folks in Oregon have plans. They may end up changing policy in America. But the war is bigger than all of us; it involves the most basic human trait—greed. It will take a revolution of will and consciousness to turn this ship of fools around.

Meanwhile, I see Dan Rather, his all-too-familiar face smiling out at homebound America. He tells me the fish I am eating may not be as healthy as I think. Cut to a man in Mississippi. The man has landed a catfish in his boat. The thing is unhappy out of its element; it flops violently in futile attempts at freedom. A voice asks: what will you do with these fish you're catching? The man replies: Cain't sell 'em 'round here; everybody knows they're contaminated. So's I take 'em up to New Jersey and sell 'em to them people up thar. He smiles for the camera.

It's good to see something educational on TV. I wonder what the New Jersey governor thinks about what just aired. Interstate commerce—the veins of America—through which course the drugs that keep America happy.

I skip the rest of the conference, choosing to relish my remaining hours in lush Oregon. I am not a regulator. I have not read the Clean Water Act. This activity is for other, more studious members of the trade. There will be other conferences, more opportunities to mingle with the dioxin crusaders. For now, I seek the solace of a drive up the Pacific Coast. It is whale migration season.

Flying out of Portland, I note that the city is a monster. The plane veers over eastern Oregon, en route to my next stop on the toxic trail: Dallas. I see vast areas of clearcut land, covered with the remnants of this year's snow. From thirty thousand feet the ground appears variegated, scarred vestiges of humanity's desire for cheap timber ... for white milk cartons.

Hours later I make the following notation:  
*Dallas is an obscenity upon the land;  
Spread like a fungus, glittering like an open sore.*

*Do we dig coal to light up this place?  
Do we dam rivers for this disease?  
There should be a law: No More Dallas.  
(from aboard Delta DC-9; high above the Big D).*

—Dr. Dioxin

*I'm going back to Dallas, Texas, to see if anything could be worse than losing you ...*

—Austin Lounge Lizards, from Highway Café of the Damned

# Draft Ancient Forest Reserve System

*ed. note: The following is an abridged version of a new proposal that can serve as model for wilderness proposals on other National Forests. For a copy of the complete proposal, send \$5 (copying costs) to The Willits Environmental Center, 42 S Main St, Willits, CA 95490.*

by Ellen Drell and Don Morris

## PREFACE

The following Ancient Forest Reserve proposal for the Mendocino National Forest was done according to mapping guidelines required by key members of the California Ancient Forest Alliance (CAFA) to develop "Political Contingency" maps which would supposedly be used in the Congressional process for ancient forest legislation.

While the Mendocino proposal was reluctantly done according to the confusing mapping guidelines, and submitted on time, lobbyists from CAFA refused to present the proposal to Congress during the "ceremonial unveiling of the maps" because it was thought to be "too confusing." The Mendocino National Forest mappers felt that it was important to prepare a visionary, complex map that was ecologically and spiritually defensible, rather than a "graphically simple" map that could be used for a political sellout.

The Mendo mappers were encouraged in their endeavors by Northcoast Republican Congressman Frank Riggs who pledged (before the November 1990 election) to support ancient forest legislation and exclaimed that the Mendocino mapping project was "exciting." Congressman Riggs has since backpedaled into Big Timber's KOA Campground.

## INTRODUCTION

The following narrative journey through the Mendocino National Forest of northern California is one of love, of great pain, and of fitful hope. This is a place that provided for humans abundantly, with every need—food of every description, legendary game herds, salmon and Steelhead; shelter; clothing; hot baths, cool showers; long grassy ridgetops with endless views; forest cathedrals—for 10,000 years.

This is the Mendocino National Forest, the southern terminus of the Klamath Mountain Province. It is located along a major ridge of the inner North Coastal Mountain Range, and extends from its climax in the South Yolla Bolly Mountains southward to Snow Mountain and Goat Mountain near Clear Lake.

The Mendocino's unique ecosystem diversity sustained a wide range of wildlife species including Elk, Grizzly Bear, Gray Wolf, and Wolverine. The north and northeast portions of the forest were dominated by dense stands of mixed conifers, while White and Red Fir prevailed at higher elevations. The drier southern slopes supported a rich blend of oak and chaparral with mixed conifers on north and east-facing slopes. The central core of the forest, marked by magnificent north/south trending ridges, was once a lush perennial grassland—with mixed oak and conifer forests sloping off in all directions. The forest streams were graced with abundant salmon and Steelhead runs.

But the gentle eastern foothills and the broad river canyons allowed easy access to

white settlers. The indigenous Yuki, who had lived exclusively in the valleys of what is now the Mendocino National Forest for at least 5000 years, were virtually exterminated by the first white settlers within two decades. Herds of sheep, goats, and then cattle, brought in by ranchers attracted to the area's legendary rangeland, decimated the forest's extensive perennial grasslands. Vast areas of what has been called the world's finest summer range are now "erosional pavement" with no vegetation at all.

In the early 1900s, small-scale logging began. By the 1950s, the United States Forest Service, under pressure from large timber companies, began to road and log the best timberlands. Today, logging roads invade nearly every part of the Forest that supports even marginal timber stands. Once majestic forests are now described as "open areas with clusters of pole-size trees." The Draft Forest Plan describes "the poorly stocked stand condition that now exists over much of the Forest" and attributes this to past timber harvesting practices.

Despite this plundering, the Forest Service, again at the urging of the timber industry, plans continued logging of the remaining unprotected old-growth. The bitter irony is that National Forests were originally set aside as Reserves specifically to wrest them from the exploitive practices of the large timber companies, so they could be used and enjoyed by the general public in perpetuity. Due to political maneuvering, deceit, and ignorance, these forests are now managed almost entirely to benefit the timber industry.

The Ancient Forest Reserve System described in the following pages, and depicted on the accompanying map, encompasses three-fourths of the Mendocino National Forest. We feel this bold recommendation reestablishes the spirit of the National Forest Reserve System as it was originally conceived 100 years ago. The boundaries of the Mendocino National Forest, established in 1907, protected the naturally shifting mosaic of its varied and interdependent ecosystems. Those boundaries made sense then, and they make even more sense today.

This naturally shifting landscape mosaic on the Mendocino is the result of broad variations in elevation, moisture, exposure and soil types, and resulting variation in disturbance regimes. The old-growth conifer stands, in

*continued next page*

particular, were naturally patchy due to these conditions. Forty years of logging and road-building has so disrupted this forest cover that no large intact old-growth conifer stands remain outside of the Yolla Bolly Wilderness. Old-growth is now an extremely rare successional stage of forest type on the Mendocino, and its many dependent wildlife species are in danger of local or regional extinction.

A biologically viable conservation strategy for the fragmented ancient forest ecosystems on the Mendocino is to preserve the remnant old-growth and associated forests (however small) in large ecologically diverse core reserves connected by riparian and ridgetop corridors. These corridors will allow for the migration and dispersal of native animals and plants. These remnant ancient forests, along with the Wilderness Areas and the roadless areas, protected and nurtured, will be the germ from which this once magnificent forest can be restored.

The following Mendocino National Forest Draft Ancient Forest Reserve System includes all existing Wilderness Areas, all category 2 Habitat Conservation Areas (HCAs) for the Northern Spotted Owl, most category 4 HCAs, and most remaining roadless areas.

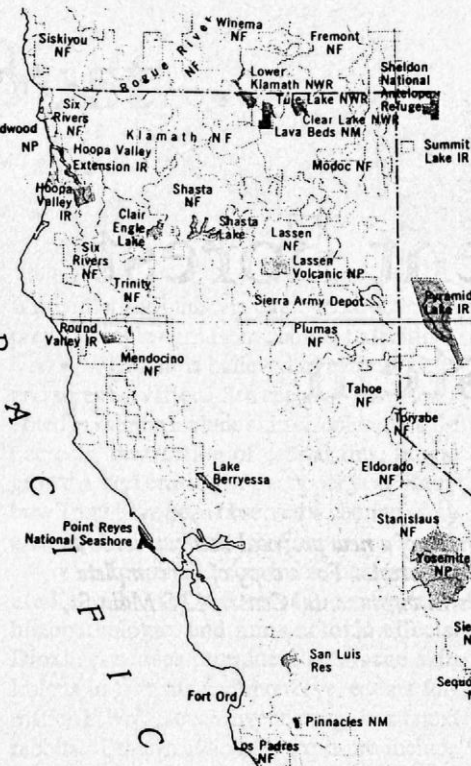
The Reserves and Corridors are:

- R-1 Yolla Bolly/Middle Eel Reserve;
- R-2 Thomes/Grindstone Reserve;
- R-3 Snow Mountain/Refuge Reserve;
- R-4 Middle Ridge Reserve;
- R-5 San Hedrin Reserve;
- C-1 Thomes/Crest Corridor;
- C-2 Black Butte River Corridor;
- C-3 Eel River/Corbin Creek Corridor;
- C-4 Rice Fork Eel Corridor;
- C-5 Bucknell Creek/Benmore Canyon Corridor.

All of these areas are within the boundaries of Mendocino National Forest with the exception of Hamm Pass in the Yolla Bolly Middle Eel Reserve which is managed by the California State Lands Commission.

## TIMBER VOLUMES

The Forest Service was unable to provide timber volume figures affected by this proposal in part because of the newly designated Habitat Conservation Areas. Undoubtedly this proposal would dramatically reduce the amount of logging allowed on the Forest. Mills in the surrounding communities, and in fact whole communities, were built around unrealistic and downright deceitful promises of sustainable flows of logs from our National Forests. We can either continue to supply those mills and communities for another five to ten years, and utterly eliminate the remaining old-growth and reasonably sound residual forests before fac-



ing mill closures, or we can face mill closures now while there is still a chance to restore and preserve our National Forest heritage. It is simply a question of courage. We either pass the buck to some future Congress, or we deal creatively and sympathetically with loggers, mill workers, and their families now by providing retraining programs, funded restoration programs, and the like.

## DATA BASE

The data base for this mapping project originated with aerial survey information obtained by the US Forest Service in the late 1970s. Local conservationists worked with Forest Service personnel to develop "Timber Type" 7 1/2 minute quadrangle maps delineating old-growth timber stands based on Forest Service criteria (size class: greater than 21" DBH, and crown closure: greater than 40%).

The maps were sent to the four ranger districts to be updated to include timber losses from logging, fire, and windthrow that occurred since the original survey. The biology department of the Mendocino National Forest then plotted the remaining old-growth stands, including associated younger forests (size: less than 21" DBH, crown closure: greater than 40%) on 1/2 inch to the mile (1:126,720) Forest Recreation Maps.

The Mendocino National Forest Draft Ancient Forest Reserve System Proposal is the first phase of an ecosystem mapping project based on landscape ecology.

## PROPOSED ANCIENT FOREST RESERVES

### R-1 YOLLA BOLLY - MIDDLE EEL RESERVE

(Yolla Bolly Wilderness, HCA #C-15, Middle Fork Addition A-1)

This reserve has been a dream of conservationists and biologists for decades. Topographically, the Middle Eel, from its headwaters in the Yolla Bolly Wilderness to its confluence with the Black Butte River, forms a distinct ecological unit. The upper reaches of the Middle Eel are already protected in Wilderness, and although logging and roading have invaded the ridges outside of the Wilderness boundary, the inner canyon of the Middle Eel is relatively intact. It is logical to wrap the rest of this magnificent canyon in a reserve boundary. We would thereby protect the Mendocino National Forest's only adequately large core reserve that still retains most of its original floral and faunal components.

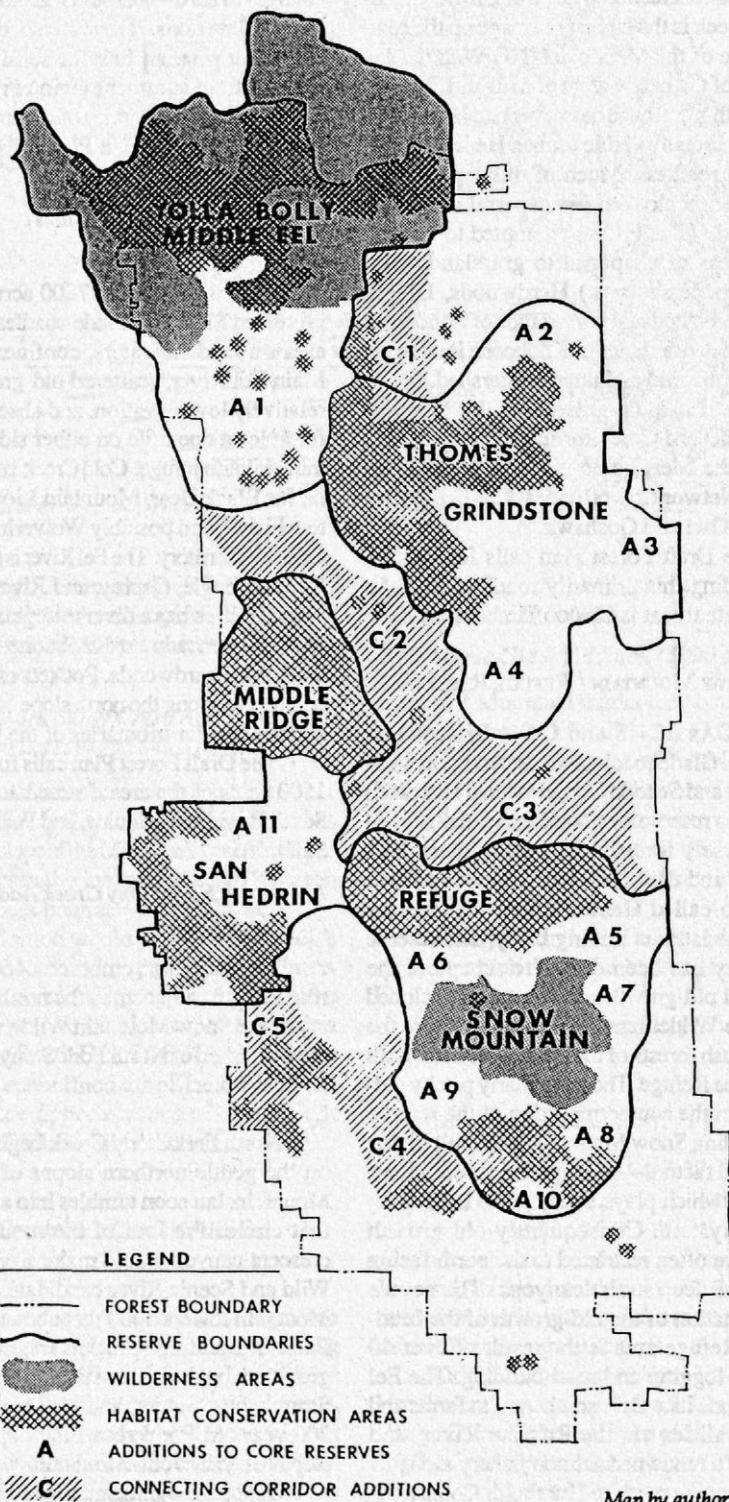
#### A-1 Middle Fork Eel Addition

(57,000 acres; elevation 1600 feet at the Black Butte River confluence, to 6954 feet at Anthony Peak. First Congressional District.)

The area includes the watershed of the Middle Fork Eel River from the Yolla Bolly Wilderness boundary on the north to its confluence with the Black Butte River on the south. To the west, it includes the Big Butte-Shinbone Roadless Area, and the State Lands Commission Hamm Pass area. To the east, the boundary follows the Coast Range Crest to Anthony Ridge and then follows Anthony Ridge until it meets the Middle Fork Eel.

The Middle Eel is a federally designated Wild and Scenic River. This portion of the Middle Eel contains California's last viable population of summer Steelhead, which summers in the pools of the Middle Fork before spawning in the fall. In part because of the fragility of this species, the California Department of Fish and Game recommended protection for the entire drainage in a 1978 report. "The need for retention of these areas is based on known fish and wildlife requirements and the probable effects of logging, road building, and other conflicting land uses on that habitat." (Fish and Wildlife Resources of the Big Butte-Shinbone Planning Unit, Region I & II, CDFG, 4-78)

The area contains the highest concentration of designated Spotted Owl habitat in the Mendocino National Forest. It supports 150 avian and 60 mammalian species, including Bald Eagle, Golden Eagle, Peregrine Falcon, Merlin, Great Horned Owl, Spotted Owl, mergansers, Mallard, Great Blue Heron, sandpiper, Dipper, kingfisher; Pine Marten,



Map by authors

Fisher, Mink, River Otter, Mountain Beaver, Badger, Ringtail Cat, Black Bear, Mountain Lion, and possibly Wolverine. The Middle Eel and its tributaries support winter and summer Steelhead and resident trout.

The wide variety of wildlife using the area reflects the habitat diversity. From the summit of Anthony Peak to the tumbling waters and turquoise pools of the Middle Eel canyon are

old-growth mixed conifer forests of Ponderosa Pine, Douglas-fir, Incense Cedar, and Sugar Pine; open meadows; vernal pools; rocky outcrops; oak woodlands; plunging side creeks; springs, and seeps with gooseberry, willow, and wild raspberry.

This area also has several ancient and active landslides, some massive in size, making it especially vulnerable to the effects of

logging and roading. Though roads traverse both sides of the canyon to the Wilderness boundary, and though many of the best stands of old-growth have been logged from the upper elevations, the remoteness, ruggedness, and instability of the Middle Eel canyon have discouraged more intense logging until now. As a result, the drainage is liberally peppered with old-growth stands and not yet scarred by the maze of logging roads found in other parts of the Forest.

But this *de facto* protection is at an end. The Draft Forest Plan calls for logging in most of the remaining timber stands, forty percent of which would be clearcut. Immediate threats are Hamm Pass Timber Sale, in an area with some of the largest and oldest Douglas-fir remaining on the entire Forest; Ant Timber Sale, despite appeals from several conservation groups; Blands Timber Sale, which lies within a designated fur bearer corridor; and Shields, Fly Creek, Rock, Baldy, Grass Trap, and Basin Timber Sales. This list includes only those sales scheduled through 1993.

#### R-2 THOMES/GRINDSTONE RESERVE

(HCA #C-16, Ball/Thomes Gorge Addition A-2, Deer Mountain Addition A-3, Grindstone Addition A-4)

This reserve embraces the dry chaparral foothills of the eastern slope of the Mendocino and reaches into the cool forested pockets of upper Thomes and Grindstone Creeks. It includes some of the larger remaining tracts of old-growth conifer stands on the eastern slope of the Coast Range Crest, and over 43,000 acres of unprotected roadless area. The drier conditions of the eastern slope, and the severe fragmentation of the original forests, demand a broadly drawn reserve if it is to have the diversity and resilience to withstand the natural stresses of changes in weather, climate, and insect populations, as well as the stresses of past human abuses.

#### A-2 Ball Rock/Thomes Gorge Addition

(24,000 acres; elevation 1000 feet at Thomes Gorge, to 6663 feet at Ball Rock. Second Congressional District.) (*ed. note: Hereafter, most of these specific location details are omitted from this article to save space. They are in the full proposal available from The Environmental Center (address below).*)

This addition lies on the eastern slope of the Coast Range Crest in the northern third of the Mendocino National Forest. The addition contains headwaters of the tributary streams to the lower reaches of Thomes Creek. Notable among those for their remnant old-growth conifer forest and their outstanding wildlife habi-

*continued next page*

tat are Henderson Canyon and Dark Canyon.

The Forest Service considers this portion of Thomes Creek, from "The Slab," an old grade crossing, to The Gorge, to be a candidate for Wild and Scenic River status. Though Thomes Creek carries a heavy silt load from the gulying of past and current logging roads and clearcuts, the resident trout population is still an attraction to anglers.

The vegetation varies from chaparral and glades along Thomes Creek at the lower elevations to oak savannah and mixed hardwoods at 1500 to 3800 feet, to Ponderosa Pine stands, to mixed conifer forests above 4000 feet, and finally to true fir stands at the highest elevations. The addition contains the FS proposed 1100 acre Devil's Basin Research Natural Area which contains outstanding stands of Black Oak and mixed hardwoods. The area includes Spotted Owl habitat and a potential Peregrine Falcon nesting site.

The slopes and ridgetop to the north of Thomes Creek were once heavily used for recreation, hunting, and fishing. The area is readily accessible from the Sacramento Valley. The ridgetops were cool and moist with meadows, numerous springs, hiking and equestrian trails, sheltered in tall pine and fir forests. In the 70s the accessible ridgetop forests were logged rapaciously. All but one trail have been obliterated by logging roads, and most of the remaining old-growth is cowering in the steeper canyons.

This ridgetop is the source for many of the tributaries to Thomes Creek. The several wet meadows and springs are important summer range for a wide variety of wildlife. We want to begin the process of restoration through reserve status, road closures, and erosion control.

The immediate threats to the area are logging and road-building. Planned for the next two years are Poison, Rocky, Telephone, Topple, and Wild Rabbit Timber Sales. Other threats are hardwood removal and continuing erosion from gullied logging roads.

#### *A-3 Deer Mountain Addition (26,000 acres)*

The Deer Mountain Addition contains all of the Deer Mountain Roadless Area south of Hall Ridge. The area has five perennial streams, all of which drain into the Sacramento Valley, one of them via Thomes Creek.

There are seven small pockets of old-growth coniferous forest in the headwaters of Salt, Bowers, and Heifer Creeks. Grassland, chaparral, and Digger Pine cover much of the area.

#### *A-4 Grindstone Addition (47,000 acres)*

The addition embraces the Grindstone watershed from Grindstone Creek's headwa-

ters to its confluence with Mill Creek. Grindstone Creek is the largest drainage on the eastern slope of the Mendocino NF. With the exception of the headwaters of Mill and Shepard Creeks, this drainage has never had large tracts of commercially viable timber. Hence, it is essentially roadless. Much of this broad, open watershed is cloaked in chaparral and some grassland. (The FS has attempted to convert large areas of chaparral to grasslands with questionable success.) Hardwoods, Digger Pines, some unusual pure stands of Ponderosa Pine, and dense stands of Knobcone Pine cover much of the mid and upper watershed.

The dense old-growth conifer forest of upper Shepard Creek forms the eastern-most arm of the Mendocino National Forest Fur-bearer Network. It provides key habitat for Spotted Owl and Goshawk.

The Draft Forest Plan calls for logging and roading this primarily roadless area. An immediate threat is Skidoo Timber Sale.

#### **R-3 SNOW MOUNTAIN / REFUGE RESERVE**

(HCAs #C-18 and C-21, Briscoe and Skeleton Glade roadless areas, Additions A 5-10. First and Second Congressional Districts.)

This reserve has two hearts: the rugged and sparsely forested Snow Mountain Wilderness, and the headwaters of the Eel River in the so-called Game Refuge. The former beats; the latter is leaking badly. The reserve boundary has been drawn to recapture the scattered old-growth conifer stands excluded from the Wilderness Area, and to restore the former lush forests of the Eel River headwaters and Game Refuge. The particularly patchy old-growth in the southern portion of the reserve surrounding Snow Mountain is a result in part of natural factors—soil type, drier conditions, and fire, which plays a major role in shaping the ecosystem. Consequently old-growth stands are often restricted to the north-facing slopes of deep moist canyons. The severe fragmentation of the old-growth of the headwaters/Refuge area is the result of over 40 years of logging and road-building. The Eel River sends its waters southward to farms and municipalities via the Russian River, and provides a renowned salmon fishery along its natural course north to Humboldt County.

#### *A-5 Briscoe Canyon Addition (4500 acres)*

This area is the intact, unprotected, complete watershed of Briscoe Creek, which lies to the northeast of Snow Mountain and flows eastward from the Coast Range Crest to the Forest boundary. The old-growth conifer stands are in the uppermost reaches of the watershed. Chaparral at the lower elevations

changes to hardwoods and mixed conifer at the higher elevations. The watershed provides an important riparian link for sensitive wildlife moving from summer to winter range.

Despite the scarcity of commercial forest cover, the Draft Forest Plan calls for logging over 600 acres.

#### *A-6 Skeleton Glade Addition (11,000 acres)*

This area includes 7800 acres of the un-protected Skeleton Glade roadless area. The area's abundant waters, confluence with the Main Eel River, scattered old-growth stands, relatively low elevation, and absence of roads for at least one mile on either side makes it a mini wildlife refuge. Cold Creek provides habitat for Black Bear, Mountain Lion, Pine Marten, Fisher, and possibly Wolverine. It is a key Goshawk territory. The Eel River is prime habitat for Bald Eagle, Osprey, and River Otter.

The area has a diverse vegetation mosaic with open meadows, Knobcone Pine stands, and mixed hardwoods. Pockets of old-growth conifers lie along the north slope of Cold Creek and the smaller tributaries of the Eel River.

The Draft Forest Plan calls for logging on 1500 acres of the area. Immediate threats are South Boardman, Squaw, and Peavine Timber Sales.

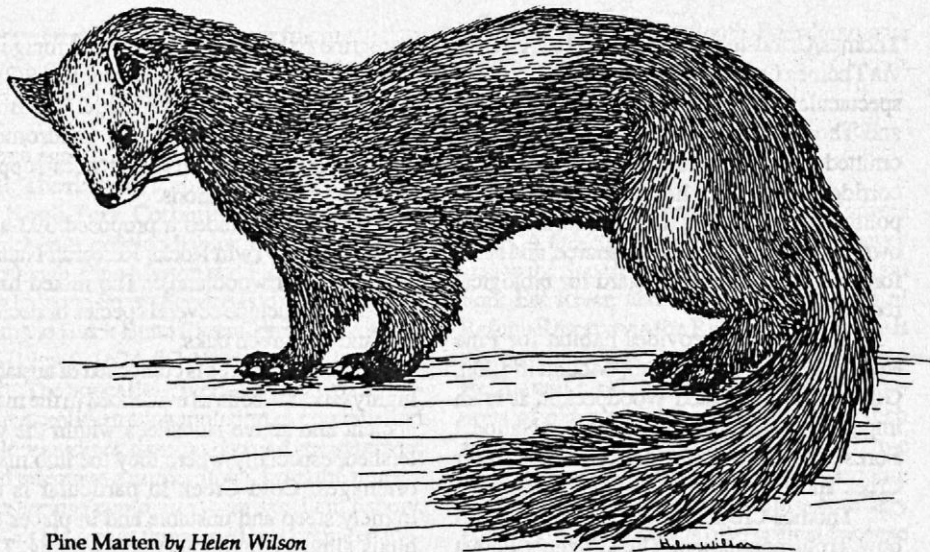
#### *A-7 North Fork Stony Creek Addition (13,400 acres)*

This addition embraces 4600 acres of roadless area adjacent to the northeast boundary of the Snow Mountain Wilderness. This is the watershed of North Fork Stony Creek from its headwaters to its confluence with Stony Creek.

North Fork Stony Creek begins modestly on the gentle northern slopes of Saint John Mountain, but soon tumbles into a steep gorge that circles the foot of the mountain. This crescent canyon would make a prime federal Wild and Scenic River candidate. Saint John Mountain towers 5000 feet above the canyon floor. The addition protects fragments of old-growth mixed conifer stands in North Fork Stony's headwaters, and rare pure stands of 200-year-old Ponderosa Pine on the eastern slopes of Saint John Mountain.

Of special significance here are the grassy openings surrounded by Blue and White Oaks found along the sweeping spine of Open Ridge. Black Oaks and mixed conifer stands border these openings at the higher elevations. Open Ridge provides valuable forage and summer range, as well as a prime research natural area for endangered California oaks.

The Draft Forest Plan calls for logging and road-building in 2500 acres of unprotected roadless area contiguous to Snow Mountain.



Pine Marten by Helen Wilson

Over-grazing threatens the grasslands and has virtually eliminated oak regeneration. Hardwood removal and firewood cutting threaten existing oak stands.

**A-8 South Fork Stony Creek Addition**  
(12,000 acres)

This area encompasses the headwaters of South Fork Stony Creek, and the lower reaches and eastern slope of the Mill Creek watershed. The addition closes the inexplicable gap between the Wilderness boundary and HCA #C-21.

The addition would protect Mill Creek's old-growth ecosystem, provide an uninterrupted riparian and ridgetop link between the diverse ecosystems of this area, and provide a buffer along South Fork Stony Creek which is the Wilderness boundary. The springs and glades in the upper reaches of South Fork Stony and Mill Creeks make this a popular recreation area.

**A-9 Bear Creek/Rice Creek Addition**  
(11,300 acres)

This area would protect old-growth mixed conifer stands along the north-facing slopes of Bear Creek and lower Blue Slides Creek. Due to the drier conditions and resulting natural patchiness of old-growth in this part of the Mendocino NF, each remnant stand becomes increasingly significant to species dependent on old-growth. This area of the forest is swept by fires about every 20 years. Consequently, many ridgetops and south slopes support predominantly Knobcone Pine. The salvage logging following the 1987 fires has left vast areas in ruins.

The southwest slopes of Snow Mountain around Potato Hill are dotted with moist, grassy glades. These are a unique and welcome diversion, for both wildlife and recreationist,

from the predominantly chaparral covered southwest-facing foothills.

**A-10 Horse Glade Addition** (5000 acres)

Goat Mountain marks the southernmost high point on the 65 mile long Coast Range Crest that forms the spine of the Mendocino National Forest. This addition smooths the HCA #C-21 boundary that surrounds the patches of old-growth dotting this ridge top, pulling the protective boundary down the southwest slopes of Goat Mountain to include an unlikely abundance of meadows and springs, which form the headwaters of Rice Fork Eel River.

Off-road vehicles are the primary threat here.

**R-4 MIDDLE RIDGE RESERVE**

(Coincides with HCA #C-17)

This reserve is named in honor of the Huititnom—people of the Middle Ridge—who are believed to have lived on its broad, flat, and grassy shoulders for 5000 years. In the 1850s the Huititnom were virtually exterminated by European settlers.

Middle Ridge (now called Etsel Ridge) is to the southwest of, and parallel to, the Coast Range Crest. Its broad, open crest extends for 7 miles from the headwaters of the Black Butte River to 2 miles south of the confluence of the Black Butte and Middle Fork Eel Rivers. The lush grasslands gave this area the reputation of having the finest summer range in the world! Its deer and Elk herds were legend. Vast areas of this former range are now "erosional pavement," devoid of vegetation and soil due to sheep, goat, and cattle grazing, and subsequent erosion.

The slopes of Middle Ridge dip gently, then steeply into Thatcher Creek to the west,

and Black Butte River to the east. Though much of the conifer forest has been logged and roaded, pockets of old-growth remain.

The relatively gentle slopes, low elevations, and wide variety of soils give rise to a rich mix of conifers, hardwoods, meadows, oak woodlands, rocky outcrops, and riparian habitats. Several pairs of Spotted Owls use the area, and at least one nesting pair of Peregrine Falcons. The Forest's only documented Wolverine sighting occurred here in 1975. This area was a stronghold of the awesome California Grizzly Bear—our state animal, now extinct.

There are at least 26 prehistoric sites on the Middle Ridge. Though it will be virtually impossible to replace the grasslands, creating a reserve could halt the rapid ecological unravelling of this cultural heart of the Mendocino National Forest, an ecosystem that fed, clothed, and housed humans for thousands of years. (Archeological references: Etsel Ridge Archeological Project, 3-88, by Amy Huberland. A joint project of the BLM, Sonoma State U. Anthropological Studies Center, and Santa Rosa Junior College.)

**R-5 SAN HEDRIN RESERVE**

(HCA #C-19, Elk Creek Addition A-11)

This reserve has some of the Mendocino's best, and some of its worst. Dividing the two is the gentle, once salmon-rich Elk Creek.

Lacing the forest-covered eastern slope of Elk Creek are the virtually undisturbed watersheds of Lookout, Mendenhall, and Bear Creeks. The western slope is a horrifying 10,000-acre scar from San Hedrin's 6000-foot summit to Elk Creek's surviving riparian vegetation. This is the result of clearcutting and repeated high-grading on Louisiana-Pacific's large inholding and on surrounding public land. The area was especially vulnerable to the 1987 fires; and subsequently was stripped of both standing dead and living trees in the brutal salvage logging following the fires.

However, impressive stands of old-growth mixed conifer still cloak portions of San Hedrin's steep west-facing slopes. Though fires burned through much of this area as well, these surviving stands are a graphic testament to the resilience of an intact forest ecosystem to natural disasters. We recommend that San Hedrin Mountain become a Research Natural Area for study of the combined effects of logging and fire.

"Old timers" and ranchers considered the Elk Creek drainage their "second growth wilderness." Its gentle grade, rich fishery, abundant riparian habitats, grassy benches, and richly vegetated slopes seemed to hold up even under the pressure of cattle grazing; but the last

*continued next page*

ten years has brought this watershed to the breaking point. We recommend that the L-P inholding be returned to public domain and that this Reserve designation prohibit any additional disturbance in the Elk Creek watershed.

#### *A-11 Elk Creek Addition (31,000 acres)*

The addition includes the eastern slope of the Elk Creek watershed from its headwaters at Windy Point north to the Bear Creek watershed. It also includes the brutally mismanaged L-P private inholding, and the western slope of the Elk Creek watershed. (Remarks following describe only the eastern slope.)

The outstanding feature of this addition is the nearly continuous sweep of mixed forest cover from Lookout Creek to Mendenhall Creek to Bear Creek. The upper watersheds of all three drainages contain old-growth conifer forest. These forests are especially significant because they border perennial streams, and thus provide increasingly rare habitat for dually dependent species such as the Fisher.

The highly variable terrain, landforms, and soil types provide potential habitat for the Mendocino's 12 "Management indicator species": Bald Eagle, Peregrine Falcon, Spotted Owl, Goshawk, Black-tailed Deer, Black Bear, Tule Elk, Acorn Woodpecker, California Thrasher, Douglas Tree Squirrel, Western Gray Squirrel, and Pileated Woodpecker. The 600 acres of contiguous mixed conifer old-growth near Monkey Rock is prime Spotted Owl habitat. The area contains four Goshawk territories, and provides year-round habitat for the Tule Elk.

An impressive Valley Oak woodland-savannah extends throughout the middle drainage of Mendenhall Creek. Swainson's Hawk, a state-threatened species and candidate for federal listing, frequently uses Valley Oaks. The Citizen's Forest Plan for the Mendocino calls for "broad leaf woodlands," especially Valley Oaks and Blue Oaks, to be designated "sensitive species." Oaks have not yet been logged commercially from the Mendocino, but cattle grazing has virtually eliminated deciduous oak regeneration. Firewood cutting, hardwood removal, and a future chip market could further threaten oak survival.

Continued road construction and logging threaten the area. Immediate threats are Spring, Grave, Boundary, and San Hedrin Timber Sales.

### **PROPOSED ANCIENT FOREST RESERVE CORRIDORS**

#### **C-1 THOMES/CREST CORRIDOR (15,000 ACRES)**

This corridor connects the southeast slopes of the Yolla Bolly Wilderness to the

Thomes/Grindstone Reserve and HCA #C-16 via Thomes Creek. It includes remnants of the spectacular old-growth forest of Alder Creek and Thomes Pocket which were illogically omitted from the Wilderness. Protecting this corridor would help heal the jagged scar of political horse trading that cuts across meadows, severs creeks from their source, and splits forested slopes without regard for biological requirements.

The corridor provides habitat for Pine Marten, Fisher, Black Bear, Mountain Lion, Goshawk, and Pileated Woodpecker. It is an important segment of the Mendocino National Forest Furbearer Network, through Alder Creek and Thomes Pocket.

Thomes Creek supports a resident Rainbow Trout population. The Citizen's Forest Plan for the Mendocino recommends Thomes Creek for Wild and Scenic River designation.

The Thomes Crest Corridor is threatened by continued logging and road-building. Immediate threats are Divide/Auger, Northwest Helicopter, Croney Basin, and Twin Linn Timber Sales.

#### **C-2 BLACK BUTTE CORRIDOR (46,000 ACRES)**

This corridor includes the eastern half of the Black Butte River watershed from its mouth at the confluence with the Middle Fork Eel to its headwaters. The area includes critical riparian linkages from the Black Butte River to the central ridge system of the Mendocino NF along Spanish Creek, Cold Creek (different from the Cold Creek in the Refuge Reserve), and Butte Creek. It also provides a riparian connection to the Middle Eel Reserve.

The Black Butte River's headwaters rise in the saddle that divides the Forest north and south, and east and west. The Forest Service considers this river a candidate for federal Wild and Scenic status, along with Cold Creek, one of its major tributaries. The Black Butte River was recommended for Wild and Scenic status in the Citizen's Forest Plan.

The varied terrain provides an impressive vegetative mix: chaparral interspersed with mixed conifer, meadows, hardwoods, and some pure strands of White and Red Fir at the higher elevations. Despite intensive logging since the 1970s, the corridor still has stands of old-growth conifers and associated forests, especially in the headwater areas of Basin, Middle, Sheep, and Estelle Creeks, and on the ridge around Black Butte itself.

The area includes five category 4 HCAs and seven Goshawk territories, as well as a large portion of the Mendocino National Forest Furbearer Network. It includes potential

Peregrine Falcon sites, nesting and forage areas for Bald Eagles, and habitat for Black Bear, Mountain Lion, and Golden Eagle. The Black Butte River has a struggling anadromous fishery, and many of its tributaries support resident trout populations.

The area includes a proposed 393-acre Forest Service Twin Rocks Research Natural Area (foothill woodland). The mixed hardwoods here include several species of deciduous and evergreen oaks.

Much of the area is composed of unstable, highly erodible soils as evidenced in the many ancient and active landslides within the watershed, especially where they toe into major drainages. Cold Creek in particular is extremely steep and unstable and in places exhibits almost continuous mass wasting. This natural instability has been greatly exacerbated by logging and road-building on private inholdings and on public land throughout the Black Butte watershed. The upper watersheds of Cold Creek and Spanish Creek, and the Black Butte area along Plaskett Ridge, have been decimated by high-grading and clearcutting. Many of the streams in the watershed, including the Black Butte River, exceed their sediment load capacity. In other words, they are suffocating. Further degradation in the watershed could eliminate resident and anadromous fisheries.

The Draft Forest Plan calls for logging 3000 acres in the roadless area alone! Immediate threats are Wye Salvage, Gibson, Bluff, Gulch, Pass, and Jenks Timber Sales.

#### **C-3 EEL RIVER/CORBIN CREEK CORRIDOR (38,000 ACRES)**

This extends from the headwaters of the Eel River at Spruce Grove along Kneecap Ridge to the headwaters of Corbin Creek. It then dips down to the east to include the remnant old-growth in the headwaters of Elk Creek and the springs just below the ridge line.

Kneecap Ridge straddles the heart of the Mendocino National Forest. Streams flow in every direction from the scores of perennial springs on the ridge. The Coast Range Center, as it marches north to south through the center of the Mendocino, dividing the Central Valley from the coastal mountains, sags briefly to mingle with Kneecap Ridge. The Forest's lushest stands of Douglas Fir, Ponderosa Pine, Sugar Pine, and White and Red Fir once blanketed the area.

These accessible forests were the first to fall to the axe, and all too soon the chainsaw. All that remains of this original unbroken forest are remnants in North Fork Corbin Creek, the headwaters of Wescott Creek, and the headwaters of the Eel River in the Spruce

Grove area. Despite the severe fragmentation of the forests of this corridor, by nurturing the remaining seed source, the forest soils and the plentiful water could one day support a healthy forest again.

The ridgetop springs feed the headwaters of North Fork Corbin and Wescott Creeks which still provide habitat for Spotted Owl, Goshawk, Pine Marten and Fisher. This corridor links the Forest Service Furbearer Network with the Black Butte River Corridor and HCA #C-17 with HCA #C-18.

The upper Eel River and Sand Creek support a prolific trout population. A combination of low gradient, dense and varied stream cover, and adequate summer flows from the numerous springs contribute to an excellent fishery.

This area is threatened by continued logging and road-building. Immediate threats are Gloyd Helicopter Sale, Spring Salvage Sale, and Town, Kop, Gibson, Flat, Ivory McDog, and Shillelagh Timber Sales.

#### C-4 RICE FORK EEL RIVER CORRIDOR (30,000 ACRES)

This corridor links the otherwise totally isolated HCA #C-22 in the upper watershed of Rice Creek to the Snow Mountain/Refuge Reserve, the scattered tracks of HCA #C-20, and ultimately the rest of the Forest. This linkage is important for the more mobile old-growth dependent species such as the Marten and Fisher, and for allowing adequate genetic mixing among populations of uncommon species.

The Rice Fork is a gentle, broad, open valley, similar in that respect to Elk Creek far to the north. But there the similarity ends. The Rice Fork almost seems to brood under the comparison. The chaparral, Digger Pines, vast areas of Knobcone Pine, and strangely hybridized oaks give expression to the underlying lateritic, serpentine, and volcanic soils. Road cuts literally bleed with red soils during the winter rains. The hot summer sun glints off the blue/green serpentine outcrops. Hidden in the bends of the Rice Fork are mineralized hot springs that bubble to the surface through distorted and stained fingers of deep volcanic roots.

This perennial waterway from the southern portion of the Forest to the Eel River at Lake Pillsbury is key habitat for the Southern Bald Eagle and Osprey, for both feeding and nesting. Tule Elk use the northern portions of the area for winter range. The scattered old-growth conifer and significant hardwood cover provide dispersal habitat for Spotted Owl and other species.

Long-term threats to this area are severe erosion from off-road vehicle trails and from further fragmentation of the conifer stands.

Immediate threats are South Boardman and Squaw Timber Sales.

#### C-5 BUCKNELL CREEK/BENMORE CANYON CORRIDOR (9000 ACRES)

This corridor connects the three segments of HCA #C-20 to each other, and the entire area to the San Hedrin Reserve across the Main Fork Eel River, and to the Snow Mountain/Refuge Reserve via the Rice Fork Corridor. It thereby increases the likelihood that these HCAs will be able to sustain viable populations of old-growth dependent species, such as Spotted Owl and Fisher. The home range for a Fisher (including feeding and denning areas) is at least 12 square miles, or nearly 8000 acres. This area is also critical because it includes portions of the Main Fork Eel River and Bucknell Creek, both of which support resident and anadromous fisheries.

This is one of the Mendocino's best remaining low-elevation mixed conifer old-growth forests. It is critical for research and as a seed source for natural and artificial reforestation of similar areas.

Logging and road-building threaten the area.

#### WHAT YOU CAN DO

The Mendocino National Forest, which forms the southern rampart of the 1983 Earth First 15 million acre North Coast Wilderness Preserve (see reprint in *Wild Earth* vol. 1 #1), is one of several forgotten, fragmented West Coast forests. Like the endangered eastside Oregon National Forests, it has been overlooked in the rush to save the remaining old-growth in the westside Forests of Oregon and Washington. The Wilderness Society's satellite old-growth mapping inventory included all westside Forests in Oregon and Washington, and three North Coast Forests in northern California, but the Mendocino was not included.

The Mendocino's functioning but crippled ecosystems and unique biodiversity are as precious a part of California's natural legacy as its better-known North Coast cousins. The Forest Service is currently revising its Draft Forest Plan for the Mendocino, supposedly to accommodate the Spotted Owl; but conservationists fear another business as usual plan to accommodate the timber and grazing industries. Grassroots conservationists, working through The Willits Environmental Center, are developing a visionary Mendocino National Forest Plan based on ecosystem mapping and landscape ecology.

Letters supporting an ecosystem approach to Forest Planning should be addressed to: Daniel Chisholm, Supervisor,

Mendocino National Forest, 420 E Laurel St, Willows, CA 95988.

For more information, or for an unabridged version of the above wilderness proposal, contact The Environmental Center, 42 S Main St, Willits, CA 95490; 707-459-4110.

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Protecting Habitats and Biological Diversity: Guidelines for Regional Reserve Systems (draft) 1-10-91. Reed F. Noss.

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Summer Steelhead Management Plan. Middle Fork Eel River; 5-7-81.

The Fish and Wildlife Resources of the Big Butte-Shinbone; Planning Unit and Recommendations for their Protection; California Department of Fish and Game; 4-78.

Etsel Ridge Archeological Project; Amy Huberland, 3-88.

Various Mendocino National Forest Environmental Assessments.

Personal communications with forest lovers, hikers, horse packers, anglers, hunters, Forest Service and Fish and Game personnel.

*Don Morris and Ellen Drell led the Mendocino National Forest Mapping Team. They thank the following people for their assistance in the project: Jackie & Michael Bonnifield, Maryl Morris, David Drell, Katherine Pettersen, Ryan Henson, Lynn Ryan, Barbara Chaney and Chirre Kraatz (Mendocino NF Biology Staff), Congressman Frank Riggs.*



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# Is Population Control Genocide?

by Bill McCormick

## MARX & ENGELS ON THE POPULATION BOMB

In tracing criticisms of population control, no history would be complete without a discussion of the views of Karl Marx and Friedrich Engels on the subject. In *The Communist Manifesto*, which Marx and Engels coauthored in 1848, they came down on the "justice" side of the equation with William Godwin, but differed greatly from the anarchists as to how a state of perfect justice and equality would be achieved. The Marxists argued that certain historic forces—dialectical materialism—were in operation that would inevitably result in the formation of progressive forms of society, yet they placed great faith in the power of a centralized state apparatus to bring these changes about. The anarchists, on the other hand, argued for decentralized decision-making in the revolutionary process.

Karl Marx didn't say much specifically about overpopulation, though he did make a point of calling Thomas Malthus "a bought advocate," and "a shameless sycophant of the ruling class."<sup>(1)</sup> Engels had more to say about population issues:

*The area of land is limited—this is perfectly true. But the labor power to be employed on this area increases together with the population, and ... science, the progress of which is just as limitless and at least as rapid as that of population ... it is ridiculous to speak of overpopulation while the valley of the Mississippi alone contains enough waste land to accommodate the whole population of Europe.... We are forever secure from the fear of overpopulation.*<sup>(2)</sup>

One scarcely knows where to begin with this mass of utterly unecological and fallacious views. We see here a strong profession of faith in the Cult of Science. From the "valley of the Mississippi alone contains enough waste land ..." we can infer that any land is "waste land" until it is fully exploited by humans.

Marx collaborated this view when he wrote: "The purely natural material in which no human labor is objectified, to the extent that it is merely a material that exists independently of labor, has no value..."<sup>(3)</sup>

It is instructive to note how the tradition of technological exuberance and the illusion of limitless growth carry over here from Condorcet and Godwin, despite Marx's and Engels's differences with the earlier utopians. It is disturbing to find how closely the major spokespersons of the anarchist and socialist positions adhered to the imperial European views toward land, non-human animals, even rural peoples.<sup>(4)</sup>

## TURN OF THE CENTURY ATTITUDES

As we reach the 20th century, we begin to find more diverse views among radical thinkers as to the grandeur of the relentless overcrowding and alteration of natural landscapes by human beings. Unfortunately, one of the best known anarchist writers of this period, Peter Kropotkin, despite his insight in other areas, carried on the old conquest mode when it came to the land:

*Knowledge and invention, boldness of thought and enterprise, conquests of genius and improvements of social organization have become international growths; and no kind of progress—intellectual, industrial or social—can be kept within potential boundaries; it crosses the seas, it pierces the mountains; steppes are no obstacle to it....*<sup>(5)</sup>

*... we have no right to complain of overpopulation, and no need to fear it in the future. Our means of obtaining from the soil whatever we want, under any climate and upon any soil, have lately been improving at such a rate that we cannot foresee yet what is the limit of productivity of a few acres of land.*<sup>(6)</sup>

One notable exception at this festival of boundless optimism was anarchist geographer Elisee Reclus. Reclus had the foresight to raise a few warning flags about where all this hubris was taking us:

*The universal wish of man is to adapt the earth to his requirements, and to take complete possession of it in order to derive from it its*

## Population Problems

*immense treasures. He covers it with a network of roads, railways and telegraph wires; he fertilizes its deserts and makes himself master of its rivers; ... bores through the Alps and Andes, and having united the Red Sea with the Mediterranean, is prepared to mingle the waters of the Pacific with those of the West Indian Seas. Nearly all men, being either agents in, or witnesses of these vast undertakings, allow themselves to be carried away by the fascination of labour, and their only idea is how they can mold the earth into the image which suits them best.*<sup>(7)</sup>

Unfortunately, Reclus is virtually unknown to this day, while Kropotkin's reputation continues to prosper. Reclus, like Place earlier, offered a way out of the foolhardy drift of most of his contemporaries. Yet the door was slammed shut, and later radical writers continued in the well-worn path of technological exuberance blazed by Godwin, Marx, Engels and Kropotkin.

## THE CONTEMPORARY DEBATE

One of the present day thinkers to figure most heavily in criticisms of population control is Murray Bookchin. Bookchin is also the leading philosophical proponent of "social ecology," a school that believes domination of nature by human is rooted primarily in domination of human by human.

In one of the widest publicized ecological controversies of the 1980s, Bookchin launched a series of heated polemics against deep ecology and Earth First! at a Greens gathering in 1987, calling them reactionary malthusians for their stated goal of long-term reduction in human numbers, among other things.<sup>(8)</sup> Here is Bookchin, writing in one of his best known books, *Post-Scarcity Anarchism*:

*We of this century have finally opened the prospect of material abundance for all to enjoy—a sufficiency in the means of life without the need for grinding, day-to-day toil. We have discovered resources, both for man and industry, that were totally unknown a generation ago. We have devised machines that automatically make machines. We have perfected devices that can execute onerous tasks more effectively than the strongest human muscles, that can surpass the industrial skills of the deftest human hands, that can calculate with greater rapidity and precision than the most gifted human minds....*<sup>(9)</sup>

In a 1988 article entitled "The Population Myth," Bookchin ridicules the idea that "hu-

man beings are populating the earth in unprecedented numbers and devouring its resources,"(10) and paints a glowing picture of soaring food production, untrammled living space and a glut of oil supplies. Nowhere does Bookchin disprove that "human beings are populating the earth in unprecedented numbers," which of course we are. The 1989 Worldwatch *State of the World* report concluded that, due to recent pro-natalist gains, the world population may not stop at a mere 10 billion, but continue growing to 12 or 14 billion.(11) Since the present population stands at around 5.4 billion, even the more conservative growth estimates would be "unprecedented."

### FOOD FIRST OR EARTH FIRST?

Another popular critic of population control has been Francis Moore Lappé. In 1977, along with Joseph Collins, Lappé published the widely influential *Food First: Beyond the Myth of Scarcity* (there's that word again). Ms. Lappé's position is more balanced than Bookchin's, and in recent years she has collaborated with ecocentric philosopher J. Baird Callicott.(12) Nevertheless, in her principal works, Lappé argues from a neo-marxist perspective, scoffs at concerns over population growth, and depicts the panorama of "post-scarcity" potentials in food production that are now so familiar.

Lappé and Collins essentially endorse the "ultimate resource" theory when they write: "the wealth of any country begins and ends with people — with human labor"(13) (italics theirs). They also say: "Simply put, there seems to be no clear relationship between national production per person and the growth rate of the population. If anything, the faster growing populations appear to have a slight edge ... it is people who grow food and create all other goods."(14)

They downplay the seriousness of the population explosion.

*Because of the way the population bomb has been thrown into the public's consciousness, one is convinced that the poor are multiplying faster than ever. In reality, at least eleven underdeveloped countries are undergoing an even more precipitous decline in their birth rate than did any of the now industrial countries.... The rate of world population growth appears to have reached an all time high around 1970 and has since begun to subside.*(15)

They say these facts "effectively deflate the 'explosion' myth."(16)

Lappé and Collins do give a half-hearted tip-of-the-hat to concerns over limitless growth on a couple of occasions, and their work has been effective in outlining the role of

### Supersaturation

they've dissolved too many people  
into the East Coast melting pot  
—if one more baby is born  
—if one more immigrant enters  
the Promised Land  
—if I get off this bus in NY  
and stay  
the whole mob will crystallize  
come winging out like popcorn  
from a lidless popper  
pile people across the whole bloody country  
mountain deep  
from sea to shining sea

—Ruth Gow, *Sequoia*

maldistribution and gender and political disparity in population dynamics. Nonetheless, mocking references to population bombs being thrown, and their insistence that "it is people who ... create all ... goods," are not only unhelpful but simply inaccurate in light of the current world situation. Further, it seems to me that a more appropriate locus of value would be the Earth itself (as deep ecologists have argued), rather than "human labor," which is the same cul-de-sac Marx drove into.

In their book, *Earth*,(17) Anne and Paul Ehrlich address the maldistribution argument, as raised by Lappé, Barry Commoner and others.(18) The Ehrlichs say that while it might be true, in the short run, that enough food and other "sources"(19) are on hand to feed, clothe and house all 5.4 billion human beings, this presupposes a number of other factors, such as: 1) that all 5 billion would be content with a primarily low grade grain diet and very simple standard of living; 2) that, in a relatively short time, humankind would be able to overcome all the ethnic, social and political barriers that currently thwart efforts toward more equitable distribution; 3) that stable weather patterns will prevail, with no widespread drought, holes in the ozone layer, ground-water and top-soil depletion, or any other of the many problems that already plague the Earth; and 4) that human population would not grow greatly beyond the present level.

Needless to say, none of these factors is coming close to realization in any part of the world today. Most countries are desperate to develop in the Western style as quickly as

possible. In some places where Marxist parties have taken power, such as Ethiopia, far from fulfilling their stated goal of redistribution of the wealth, they have withheld food as a weapon to starve rival ethnic groups into submission, sometimes burning it outright.(20) We have little assurance that global weather patterns will stabilize anytime soon, since four of the hottest summers on record all occurred in the last decade. And we are experiencing growth hitherto unwitnessed in all of known time.

No wonder the Ehrlichs wryly conclude that the carrying capacity of Earth for saints would be larger than for real people.

### FOOTNOTES

1. Karl Marx (1818-1883), Friedrich Engels (1820-1895), *Marx and Engels on the Population Bomb*, edited by Ronald Meek, Ramparts Press, Berkeley, 1971, p.16. Written primarily to make concerns about overpopulation look foolish, it tends to have the opposite effect.

2. *Ibid.* pp.62,63.

3. Karl Marx, *The Grundrisse*, Random House, NY, 1973, p.366.

4. "It has created enormous cities, has greatly increased the urban population as compared with the rural, and has rescued a considerable part of the population from the idiocy of rural life." Marx & Engels, *Collected Works Vol.6, Manifesto of the Communist Party*, International Publishers, NY, 1976, p.488. For a fascinating discussion of the inadequacy of Marxism vis-a-vis the environmental crisis, see

*continued next page*

John P. Clark, "Marx's Inorganic Body," *Environmental Ethics*, Fall 1989.

5. Peter Kropotkin (1842-1921), *Fields, Factories and Workshops Tomorrow*, George Allen & Unwin, London, 1974, pp.47-48.

6. *Ibid.* p.88.

7. Elisee Reclus (1830-1905), "The Influence of Man on the Beauty of the Earth," in *Radical Geography*, ed. by Richard Peet, Maaroufa Press, Chicago, 1977, p. 63.

8. Murray Bookchin, "Social Ecology vs. Deep Ecology" *Socialist Review* (3-88). "... this same kind of crude eco-brutalism led Hitler to fashion theories of blood and soil that led to the transport of millions of people to murder camps like Auschwitz. The same eco-brutalism now reappears a half-century later among self-professed deep ecologists...." (p.13) Bear in mind the *SR* rendition is more restrained than the original version.

9. Bookchin, *Post-Scarcity Anarchism*, Black Rose Books, Montreal, 1971, p.10.

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11. Worldwatch Institute, *State of the World: 1989*, WW Norton, NY, 1989.

12. Lappé & J. Baird Callicott, "Marx Meets Muir," *Tikkun*, 9/10-87.

13. Francis Moore Lappé & Joseph Collins, *Food First*, Houghton Mifflin, Boston, 1977, p.34.

14. *Ibid.* pp. 27-28.

15. *Ibid.* p.65.

16. *Ibid.* p.66.

17. Anne & Paul Ehrlich, *Earth*, Franklin Watts, NY, 1987. Along with their more recent *The Population Explosion* (1990), I regard *Earth* as one of the most accessible sources of population information ever written.

18. In his latest book, *Making Peace With the Planet*, Pantheon Books, NY, 1990, Barry Commoner writes: "World food production is now well above the minimum requirement of the present world population, and

is growing about 30 percent faster than the population. If present trends continue, there will be more than enough food to support a world population of 10 billion when that relatively stable size is reached." p.165 It is beyond my comprehension how a person of Commoner's stature could make such statements. Where he gets his "30 percent" figure is anyone's guess. To call 10 billion humans a "stable size" is irresponsible beyond belief. One is left wondering if Barry would also endorse his fellow pro-natalist Julian Simon, who in *Discover* (4-90) informs us: "... there is no meaningful physical limit — even the commonly mentioned weight of the earth — to our capacity to keep growing forever." p.48.

19. I am grateful to the writings of Holmes Rolston, who proposes "sources" as a suitable substitute for the worn-out concept of "resources."

20. J.B. Tucker, "The Politics of Famine," *The Nation*, 1-19-85; William Shawcross, "Report From Ethiopia," *Rolling Stone*, 7-18-85.

## The Answer to All Our Problems:

# Voluntary Human Extinction

*ed. note: The following is adapted from the newsletter of the Voluntary Human Extinction Movement (VHEMT), These EXIT Times #1. VHEMT (pronounced, of course, "vehement"), though only months old, is already being called, by some conservationists, the most exciting new movement in this country since Conservation Biology. To join, write VHEMT, POB 86646, Portland, OR 97286-0646.*

If you haven't given voluntary human extinction much thought before, the idea of a world with no people in it may seem strange. But, if you'll give the idea a chance, I think you might agree that the extinction of *Homo sapiens* would mean survival for millions, if not billions of other Earth-dwelling species.

It isn't the intention of *These EXIT Times* to convince others that humans are destroying the Earth's biosphere. If someone chooses to deny the evidence surrounding us, they would ignore even the best arguments that could be presented here. And, who wants to read another long list of what's wrong with the world? Let's move on to the solution.

Phasing out the human race will solve every problem on Earth, social and environmental. It will, however, take quite a long time. For many species and ecosystems, maybe our own, there simply isn't enough time.

That's why Volunteers are usually not content to just be VHEMT. Most of us are also following our heart and are working in whatever area we feel we can do the most good for the planet.

Some choose direct aid to the Earth's ecology, such as reforestation and creating wildlife habitats. Some are involved in politics and legal systems; lobbying for laws that help to reduce human impact.

## Population Problems

Others are helping the planet by helping humans. These Volunteers' efforts might seem unrelated or even contradictory to VHEMT. However, social programs like health care, education, improving the status of women, and care for the elderly all help to slacken birth rates.

Volunteers help to save human lives by donating blood, working for reduced infant mortality rates, or trying to ease world hunger. All creatures have the right to live a long and healthy life.

Already, some Volunteers are working toward the political and economic progress that will be possible when governments become less necessary and economic systems are freed from dependency on an increase in consumers and a scarcity of supplies.

No matter what you're doing to improve life on Earth, I think you'll find that phasing out the human race will increase your chances for success.

—Les U. Knight



# Whatever Happened to the Cenozoic?

by Christopher Manes

Sixty-five million years ago, as the grand dinosaur empire came crashing to the ground, evolution took another twist and turn and ushered in a geologic era we call the Cenozoic, *recent life*. The result was a world hospitable to our prosimian ancestors, who at the time were scuttling around their forest home on shrew-like feet. During the Cenozoic, mammals proliferated; the climate became drier; the boundless African savanna took shape with its vast herds of antelope, zebra, and elephantine *Deinotheria*. It was in this flourishing environment that the lineage of *Homo sapiens* began, shaping our very bodies and souls out of the rich soil of the Cenozoic landscape.

It didn't have to be that way. Evolution could have spun off in an entirely different and unpredictable direction. With enough time, horseshoe crabs could have become the Earth's preeminent philosophers. Literate octopi might now be writing novels with all eight arms. Hominids could have remained in some dark corner of biological adaptation, where in some people's opinion they belong.

I leave it for theologians to decide whether such would be a better world. The point is the Cenozoic didn't come to pass in order to create our species. We simply got lucky. Along with the twenty or thirty million other species still alive, we got to go along for the ride.

A scant ten thousand years ago, a few *Homo sapiens* stumbled upon sedentary agriculture, initiating the Neolithic Revolution and the numberless ecological disasters that have defined history ever since. Our society is heir to that costly mistake, which has gone a long way toward producing a biologically unstable and depauperate biosphere, inhospitable to many, if not most, of the life forms characteristic of the Cenozoic—including ourselves.

Thus, one way to describe the environmental crisis going on around us, a way that puts it in its geological context, is to christen it the End of the Cenozoic.

Unlike the many other discontinuities in the history of life on Earth, however, this ending is neither natural nor inevitable. It is a product of choice, of political and ethical choices concerning our relationship with the natural world. Looking into the dying green fire in the eyes of a she-wolf he had just mortally wounded, Aldo Leopold made his choice, standing up for the proposition that nature works, and has a right to exist, for its own sake. Now our culture, this generation, will also have to face Leopold's choice, and decide whether to disavow the control of nature or continue its ill-conceived attempt to "govern evolution," as Walter Truett Anderson approvingly put it, visions of genetically engineered sugarplums dancing in his head.

In rejecting the legitimacy, not to mention the wisdom, of human dominion of nature, the biocentric environmental movement Leopold epitomized is addressing one of the most urgent problems of 20th century humanity: the need to feel at home, to have a sense of place and belonging. We may be capable of ruining the bounty of the Cenozoic, but short of some unimaginable catastrophe, in the aftermath of our spoliation, evolution will pick up the pieces and start off in some new direction in complete disregard to our needs and desires. Most probably the so-called "top" of the food chain will be lopped off or curtailed, meaning large vertebrates like us. Anaerobic bacteria have little to fear in the biological meltdown we're bringing about. According to Norman Myers, we can expect the post-Cenozoic landscape to favor r-selected species, creatures like rats, roaches, and "weeds," that do well in disturbed habitat. Inevitably, nature will triumph over Lord Man, but it will probably do so only by giving rise to a biological regime very alien and hostile to everything we call home.

Anaerobic bacteria may have nothing to worry about, but we do. Our children do. Large mammals from the Pleistocene do. All

of us like living in a world of otters and redwoods, of Ocelots, azaleas, and flamingoes—as far as we know, we need to live in such a world. The anthropogenic ending of the Cenozoic puts all this at risk and squanders the geologically rare and narrow set of ecological conditions that make life rich for our species, as well as for the millions of others that belong to this era. If the ethics and practice of ecological humility are needed to prevent that end—and nothing could be more obvious—then ecological imperialism must go, however discomfiting that may be to our humanist traditions which assert the superiority of human intellect over nature.

There is nothing mystical about the cultural changes this approach implies, though putting them into practice may be difficult. Preventing the end of the Cenozoic means listening to the requirements of the land—that is, molding our economic and social *institutions* to fit into ecological processes, rather than the other way around as is now the norm. Conservation biology has set out a clear scientific rationale for, among other things, expanding official wilderness (the undisturbed Cenozoic landscape) from the present pitiful figure of 2% of this country's landmass by about tenfold (see EF! 1983 National Wilderness Preserve System proposal, reprinted in *Wild Earth* #1); for adding buffer zones around these areas where only limited human activity is allowed; for creating wildlife corridors between wilderness areas to allow for the diversification of gene pools. This is a sound, focused program for preserving the ecological integrity of North America. Fitting our institutions and economies into it may be an arduous task, may have short-term costs, may indeed take a Herculean exertion of political will, but it is not utopian or impractical—certainly no more so than the lunatic urge of our forebears to domesticate a continent.

In other words, biocentric environmentalism is simply suggesting that our culture, for the first time in a long while, follow its better judgment.

That may be too much to ask of it. But if our society does choose the wiser path, future

*continued next page*

## Face to Face With Giants, Chasms, Savages ... and Gaia

# In Chile's Valdivian Rainforest

by Rick Klein

Emilio wouldn't budge. We all looked at him, at Jose standing over him, at one another. He just sat there in the roots and moss, slicing off a fern centimeter-by-centimeter, staring at his machete blade as it cropped closer toward his thumb.

We held our legs straight and our feet dug into the thin humus, to keep from slipping down the mountainside. Jose, the picture of frustration, looked down at Emilio. Several hours below and behind us Laguna Fria sparkled like a crystal. The cold jungle of Gabriela Mistral and Pablo Neruda hung like ancient art around us. The tapestry was drying now, after a day of rain. A pair of curious Chukaos bounced ever closer through the branches. The Chukao is Chile's Water Ouzle; the Ouzle is shaped, according to John Muir, as a pebble whorled in a mountain brook. These inquisitive little twigs had probably never seen such a troop of puffing, colorful animals.

We were the first foreigners to attempt this crossing. Once, four years ago, Jose had passed this way. We were exploring the possibility of connecting Alerce-Andino National Park's two trails.

We were approaching the high saddle straddling the park's two main watersheds. We had followed the Rio Sargasso to its birthplace at Laguna Fria and now would cross over and down to Lago Triangulo, the source of the Rio Lenca. Jose had said this ascent would be the hardest push of the three-day trek. If he remembered right, the rest was a cakewalk. From the pass it would be but a short drop down to Triangulo, then along the shore to the Lenca trail, where we would meet the truck back to Puerto Montt.

### THE SOUTHERN HEMISPHERE'S TEMPERATE RAINFOREST

This was a very important little hike. For several years we had been trying to interest major photographers and US media in the Alerce, the redwood of the Andes. With other old-growth activists from north-coastal California, I had formed Ancient Forest International, to export the crusade to save Earth's last ancient forest citadels.

Beyond merely informing the world of this hidden treasure, we were working with Chileans to create a pilot non-governmental biosphere preserve in the only biome on the planet outside of the Pacific Northwest with classic cathedral forest. In the United States, to consecrate a natural cathedral requires a Rockefeller or a Muir. In Chile, the tab is modest.

The Western Hemisphere's Pacific coastline extends essentially unbroken north and south from the Equator, until roughly 40 degrees latitude where the crust crumbles into archipelagos. Mountains rising abruptly from the sea form micro-climates with torrential rains and cool, misty summers—habitat of the fog-cradled ancient forests. The temperate latitudes, not the tropics, contain the oldest and largest life forms in known creation.

We had come to call on the oldest giant conifer. The *Alerce*, or the *Lahuan* of the fjord-dwelling Huilliche Indians, is a relict conifer. In a hemisphere long-since evolved to broadleaved species, this cone-bearer is a throwback, clinging to its final kingdom in remote mountain refuges. The hanging valleys, isolated ridges, and steep slopes of the rain-drenched southern Andes are mainly where this exiled monarch now holds court.

Before the arrival of Europeans, the huge trees grew from the mountains to the shores. In 1531 the first European outpost on the West Coast of America was established, in Ancud on the island of Chiloe. Gaining access to the

historians may look back and consider the biocentric environmental movement the most humanitarian enterprise of all time. It would have helped prevent the greatest waste in history, the conscious obliteration of the only geological era in which we can comfortably, fruitfully, and agreeably fit.

Biocentrism and humanitarianism are rarely mentioned in the same breath. Perhaps it's time to change that. Those who have grandiose visions of a semi-divine humanity governing evolution, colonizing Mars, and domesticating the biosphere to meet fictitious human needs, have illegitimately defined humanitarianism as the rejection of all natural limits. As the environmental crisis demonstrates, however, quite the opposite is true. Only by observing the limits of the Cenozoic landscape can our species prevent the loss of the kind of world in which any sense of human value is possible.

Sixty-five million years of organic evolution can't be wrong. Biocentric environmentalism celebrates and defends that gift of place which made life rich for human and nonhuman beings alike. Let the Cenozoic continue.



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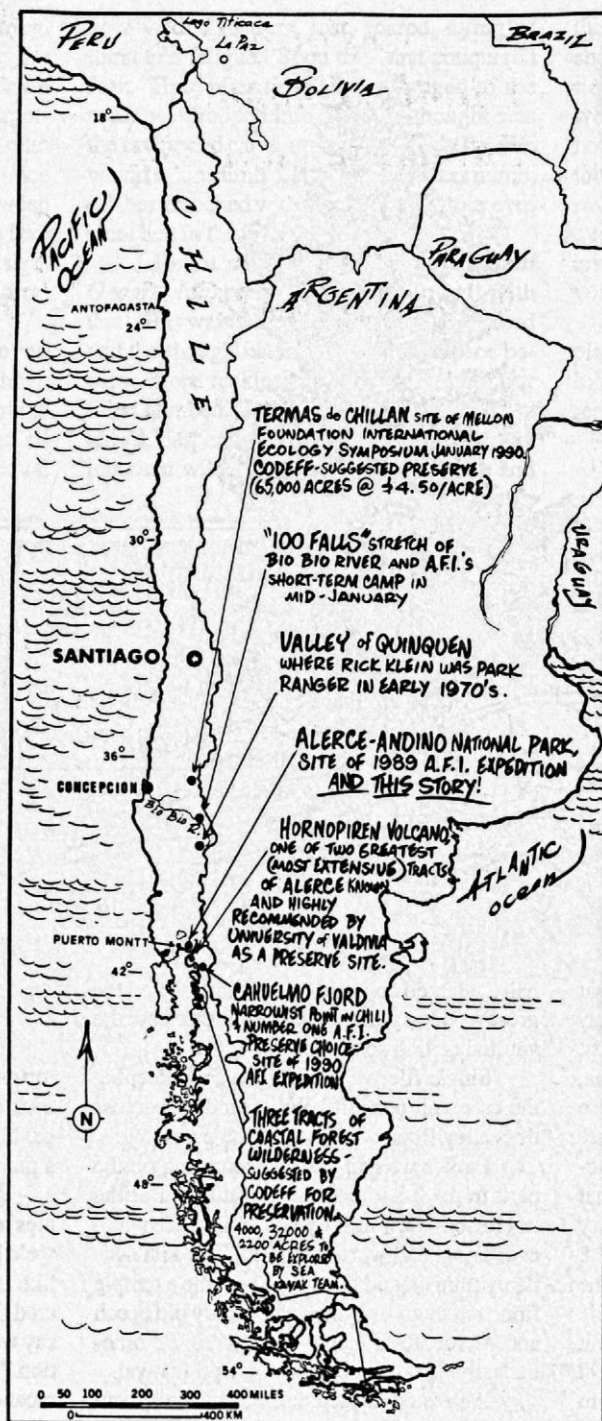
Pacific through the Straits of Magellan, the Spanish galleons, commercial emissaries from another throne in another world, suffered from the passage. The *Alerce*, which means "false larch" in Spanish, with their straight-grained, easily worked, rot-resistant wood, were used to repair the battered vessels, which then continued north.

The 500-year history of exploitation of this valuable tree legally ended in 1976. The Convention on International Trade in Endangered Species (CITES) outlawed the commercialization of the *Alerce* due to pressure from the International Union for the Conservation of Nature (IUCN; now the World Conservation Union) and Chile's Committee in Defense of Flora and Fauna (CODEFF).

## THE QUEST

Now, there was but one public trail in Parque Alerce-Andino that accessed an old-growth *Alerce* grove. We had reached this trail's end, and trekked on.

We were a diverse group. Galen is one of the world's great Nature photographers. I had talked him into attempting success where dozens of photographers, on two previous international expeditions, had failed. His wife Barbara and her brother Bob had signed on for a walk in the woods. Allen free-lanced for *National Geographic* and had done their last story on Chile. Now he was investigating this little-known forest for another feature. The possibility that the *Alerce* might be the world's oldest tree was alluring. Doug is one of AFI's major forest friends and benefactors. With Patagonia, Inc. and the Frank Weeden Foundation, he had recently created our first preserve—1000 acres of *Araucaria Pine* in a lagoon-studded crater in Chile's lake district—and now he wanted to see the *Alerce* and its biome:



perhaps the greatest ancient forest on Earth, thousands of hectares with trees averaging 2000 years each.

Danny had suddenly appeared from around the world—just when I was about to hire a porter. Jose, who had made the trail, introduced me to my first *Alerce*. Juan, Doug's old friend from Santiago, and his son Cristobal had come just before we left Puerto Montt—with a duffel bag and a big grin. Cristobal looked like he would rather be in a fast car with a pretty girl or, in fact, anywhere but in the woods with a bunch of English-speaking

grownups. I had hurriedly borrowed the world's oldest frame backpack for a thankful Juan, who was just now beginning to feel unthankful. The small of his back looked like a big oyster. And Emilio ...

We were going where no couch potato had gone and were now rowing up Chuck Creek with one oar ... Jose. The other oar, Emilio, resolute in the moss, kept slicing at his fern. Jose said he knew this portion of the cakewalk. Downhill all the way! (Except for this little hill we were struggling to hold onto.) Doug and Galen were serious adventurers.

They had been to Everest, and Galen had led trekking parties in Tibet, China, and Nepal (as you know if you've read any of his beautiful books). Doug had made first ascents of some twenty mountains and almost died on every continent, including Antarctica. Jose and I had coped with these little scrambles before. But the others were new to this. The Valdivian Forest could be steep and stubborn. But if we could reach the pass, we'd be over the hump.

Emilio's quitting now wasn't so bad. I had made other ascents, some vertical, through the hanging forests to the hanging valleys. These sanctuaries were mostly hardwood habitats with the occasional solitary gold or silver column rising within an emerald cathedral of ancient beeches, moss, ferns, and flowers. One walked through the glades as in a lotus-land, lost in contemplation, shaded by a vaulted canopy of exquisite design. Always the ascent up and through the tangle of roots, branches, and vines had been labor well-spent.

We would sweat a bit more on this climb, sharing the added burden of the pack Emilio had carried. But the pass was near. We could see light from a gap in the sinuous granite spine. We would gain that pass with plenty of light and camp by the spring Jose assured us was nearby. After a big dinner and a good night's sleep, we would drop down to Lago Triangulo ("15 minutes" said Jose) and enjoy a leisurely stroll along the virgin shore to the trail and the truck back to town.

We were thirsty! It was Summer Solstice, December 21, and even in the forest shade it was hot. I had stupidly advised against water bottles and already we were dehydrated. Temperate rainforests have the purest water known. This thought inspired me to my feet. Everyone looked at me to

solve the impasse. "No importa," I told Jose. We emptied Emilio's pack and did our best to share. Doug, as usual the camp mechanic, engineered the redistribution, shouldering most of the new weight himself. The multi-colored beast headed-up and into the hanging ever-glade, puffing toward its final reward. Mr. and Ms. Chukao, dancing through the foliage, outheld their goodbyes: "Chuka-ooo ... chuka-ooo!" They were not particularly interested in our going, our return, or our peculiar world.

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I stayed behind with Emilio for a few minutes. I couldn't bring myself to complain. He looked so guilty. He just wanted to return to his wife and kids. I paid him the exorbitant fee I had offered to avoid just this eventuality and said I was sorry he wasn't going further.

Besides, what lay ahead was the unknown ... adventure! One guide was enough.

## ANCIENT GROVES

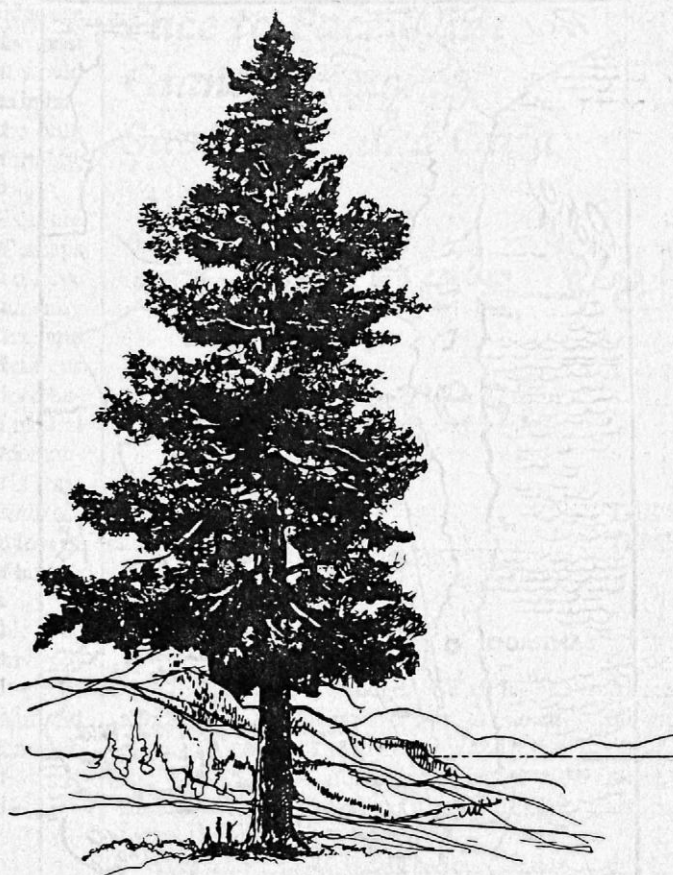
In the Alerce grove that morning we had found what we came for. How splendid were those ancient beings! Pillars of cedar set within a fluorescent green tapestry. The most elusive image on the face of the Earth must be an old-growth forest. Sunlight casts the scene in brilliance or shadow. Overcast renders it too dark. Fog is the ideal medium, and fog is what we finally got. At noon, as we were walking out, the fog cleared and the sun began streaming in.

An old-growth Alerce stand, or even an individual Alerce, would come as a surprise to the North American who assumes that only in California do survivors of Nature's once-extensive sequoia empire remain. That in 1991 there still exist unvisited cathedral forests is incredible to the wilderness enthusiast.

Although the Lahuan is not a true sequoia, it is close enough in taxonomy and appearance to be called the "redwood of the Andes." These relics are one of Nature's most successful species in terms of size and age. That they are taking their last stand in evolutionary outposts in the temperate Andes seems odd. We think of South America as tropical, and the forests as humid jungles. Few know that Chile is like an upside-down California, or that it contains such surprises as these: the highest biomass per acre outside of the best forests in the Pacific Northwest; the oldest tree species (*Araucaria araucana*) at 200 million years; the oldest forest tree (Alerce); the Pudu, a miniature deer, and relict species that evolved on Gondwanaland, the ancestral landmass of the Southern Hemisphere.

In 1988 Antonio Lara, a Chilean botanist with CODEFF, counted 3300 rings on an Alerce stump ... ten more than the oldest Giant Sequoia has. (The Bristlecone Pine, a solitary desert dwarf, has attained 4900 years in age.) Lara's count confirmed the Lahuan as the oldest tree in the forest.

The sun sent shafts diagonally through the



*Alerce, fitzroya cupressoides*

hall ... slanted columns of light intersected the great wooden pillars. Above this chamber the vaulted ceiling sparkled.

Single file we left Laguna Fria, keeping the creek on our left. We meandered across the valley floor, west toward the pass.

Earlier we had debated returning on the park trail. It had been so beautiful. But the last log bridge, missing a hand rail, made whatever lay ahead worth the risk. The kila suddenly thinned and the tangle became a temple floor, ten thousand years old. Hoary old beech and Alerce, festooned with flowering bromeliads, made our procession a Druid festival.

We rested at the back end of the sylvan amphitheater. The valley and its rioting forest climbed steeply from here. We drank our fill before grabbing the living rock for our ascent.

## OBSTACLES—WITHOUT AND WITHIN

We were soon thirsty. We pushed and pulled against gravity, plopping in the moss half way up. Danny gasped for breath like Sisyphus while Doug reengineered Juan's pack again. The rest of us stared vaguely ahead like deer in headlights—dreaming of the pass where gravity would become our friend ... of

the spring and campsite on the high saddle where we would rest and drink and eat and sleep. Emilio started whittling at a fern he had plucked. He and Jose were talking low and serious.

Minus Emilio we moved out and up, later resting one more time in the brilliant, late afternoon sunshine. The pass was in sight. Danny and I lingered behind the others, who set-off on the last leg to camp. Three hours of light left. The day was the year's longest—the age-old pagan "Christmas" where Life renews. Gaia's present to us was the celebration of Earth's Day on one of Her last wild pinnacles.

The others would have by now pitched their tents and begun enjoying their perch on this particular mountain god's shoulder. I don't know about other hikers, but the view from each new ridge is what motivates me. I was excited to be one of the first people ever to contemplate this "lost forest of the Andes."

How pleased Galen must be in the living art gallery! His enthusiasm is infectious, and I hurried to join him. Doug, that enigmatic deep ecologist, was surely in his element.

I wondered what he thought of my organizational skills after this recent mutiny. But the worst was past. All downhill from here.

Danny and I came upon no tranquil ridge-top camp with soup bubbling away beside the trickling spring. Folks were sitting dejectedly, gazing at the ground, or standing on the lip of a precipice staring 1200 feet straight down.

Jose had been right. It was only 15 minutes to the lake—the quick way! I figured that we'd be voting for the survivor's route—more like 15 hours. Visions of happy campers withered like liverworts in the sun. All Galen could say was, "This looks like serious misinformation." Doug stared hard at me. Danny just moaned. Robert observed that it looked mighty steep. Alan wondered if he'd ever write for *Geographic* again. Juan said "Oye, Gringo—this is crazy!" His son Cristobol perked-up. Finally some adrenalin for the lad. They all stared at me like a cholera microbe under glass.

Jose, who had been off exploring the rim of this mineral teacup in hopes of jogging his memory, came crashing back to us through the low kila. He couldn't exactly recall but thought the route of four years ago was somewhere back to the north. He looked uncharacteristically worried. Danny suggested we turn back. But water was needed before heads could make decisions. Jose said the spring was down a bit

to the south. We crashed down to the spring. It was dry! I dug like a dog. Nothing. We grunted back up to the saddle and back down to the north in hopes of finding Jose's forgotten way. The greenery gave out. Holding onto the world's last shrub, we were face-to-face with the abyss. We observed the broad sweep of the granite basin which contained the lake far below. No hope! To the south we lost sight of the curving wall where it dipped into a ravine. This had to be the only way.

Like sheep to slaughter we moved dumbly on. Fear is good for conquering thirst. Two hours of light—maybe. Perhaps time to find water in that distant ravine. We had all given up on Jose's trail. We were all equal

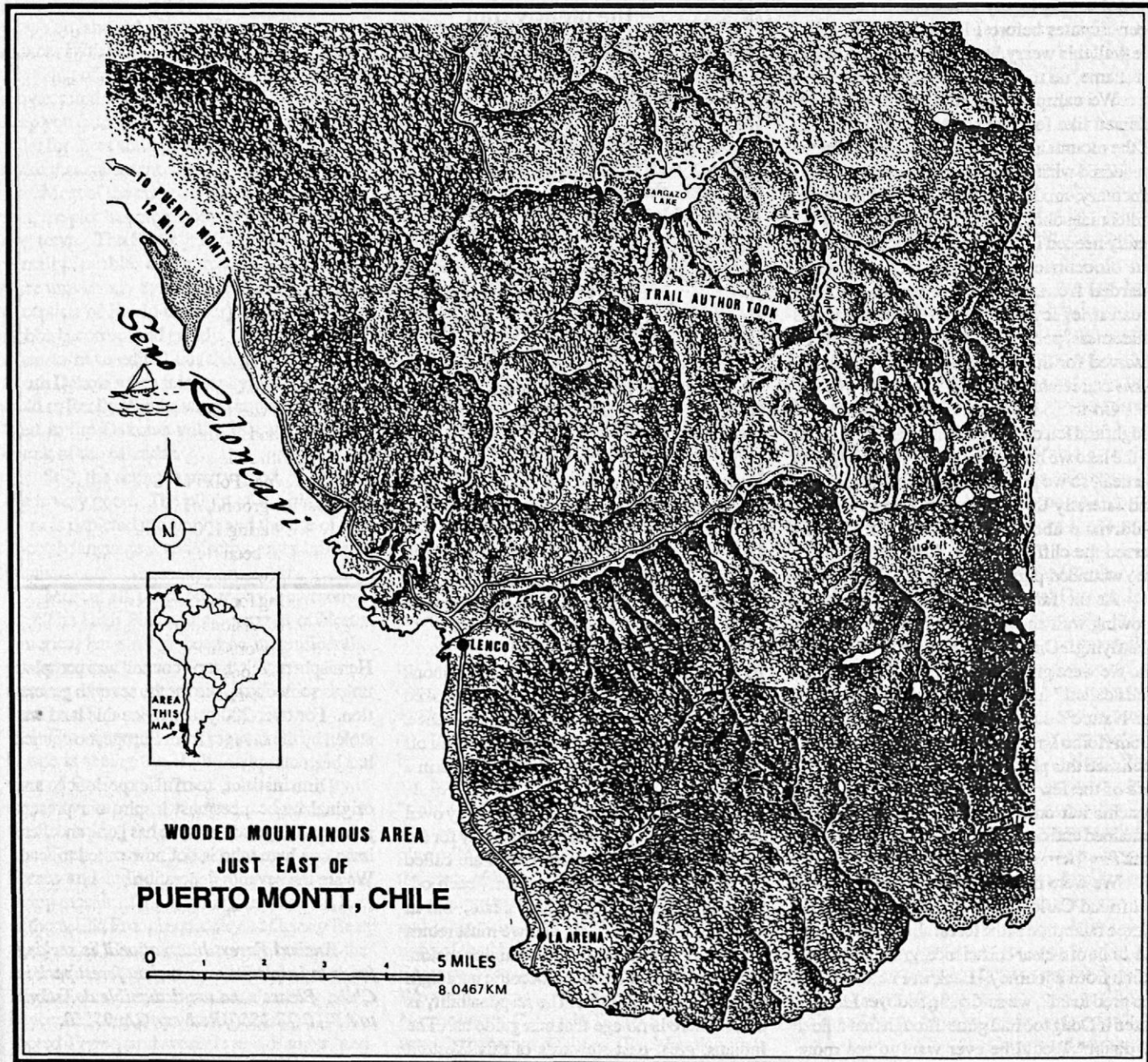
now—blind leaders, lost, scared, dying of thirst and fatigue. Soon the thirst conquered fear. Time after time as we plunged to the south we dropped into what we thought was the ravine and came again to the giddy lip. We would again climb ... legs and shoulders numb, clothes drenched with precious water, our eyes clenched in the grimace of the reckless.

I forgot about great photos, *National Geographic*, preserving land. To hell with that! This was adventure! The savage surfaced and the thoughtful succumbed. Our pace became more reckless as the sun fell and our thirst climbed. Jose, Cristobal, and I crashed ahead, desperate to lead the tribe out of this inhuman wilderness. The sun was gone and

the mountain cast us pitiful beings in fitting shadow. This place was not of man and I did not feel welcome. My biocentric gyro wobbled off-course. What good is Nature if not to my liking? My anthropocentric culture took over. I suddenly knew why the sustained ravage called "civilization" began its conquering march by putting fire to forest. What is not for us is against us. The great trees, from which we make our homes, are not our home.

I found myself thrashing about in a wild place old and dark and dangerous. I feared this inhospitable place of no earthly use. That reptile in the back of my skull was now up

*continued next page*





front and in charge. I knew then, somehow, that I was responsible for man's onslaught.

A vertical world is for the birds. Hanging there I told Kerouac he was wrong: you can fall off the mountain! Soon light and fatigue would not allow us to climb again. We chose the base of a great boulder to traverse. Our toes in the moss and humus, we hugged the rock's face, skirting it single file. My hands gripped the wet moss for support. I felt water ooze from between my fingers. Like a beaten fighter I buried my face in the moist mat. I was so thirsty! Like a mother, the mountain gave.

Every adult should experience that return to the breast. Earth is indeed Mother and we her children. I buried my face in the deep, cool moss, sucking loudly and well. It must have been minutes before I looked up. All along the wall this weary litter was busy suckling ... no shame, no mind ... happy animals.

We camped that night in the ravine. Blessed like few, we slept cradled in the lap of the mountain. Around the morning fire we wondered what right we had intruding into this sanctuary, anxious anthromorphs disturbing millennial solitude. Perhaps what is most urgently needed is not more trail-laced parkland but biocentric biosphere preserves, safeguarded from, not for, humankind. If the greatest legacy our generation can leave is wilderness, perhaps this wilderness should be reserved for that future day when *Homo sapiens* can relate?

On these musings we broke camp and fought and fell our way down. The virgin shore of the lake we had planned to amble along was vertical, so we pulled our pack-laden asses up and laterally through the entangled Bosque Valdiviano above Lago Triangulo. We traversed the cliff faces, thrashing and grunting like wounded pigs in a thicket.

At the far end of the lake we left the growing wall and entered forest floor. It was like flying! Once again the biome welcomed and we were graced by the pillar beings. The birds called. In this enchanted forest, Nature for Nature's sake seemed like a good idea. From *Homo Ignoramus* I sprang *Magnanimus*. I relished this place, this rare wooded valley ... one of the few high-biomass temperate ecosystems left on Earth. Could we save what remained and create the "Lahuan International Park?"

We were hours late for our pick-up. My old friend Carlos, the park ranger, was straddling a fallen tree in the forest ahead. He smiled the smile of a clear conscience, greeting friends home from a journey. Back in Puerto Montt, too tired to talk, we said our goodbyes. I wondered if Doug too had gone through that tunnel of doubt. Would he ever want to see more

## Serendipity

late july and snowdrift  
still on the ground as we go into  
this cup of a valley  
for an assault on a still-virgin peak  
i slip and slide in my pack,  
braking myself with ice axe  
clumsily applied.  
after we reach bottom  
and thread our way along  
the muddy trail  
hikers have used before us,  
we make ourselves a camp  
beneath some trees  
to the side of a meadow.  
we camp here for days,  
during which time we cook,  
eat, sleep, eliminate  
and climb. our last act  
is to break camp, and head back.  
there, on the trail ahead of us,  
where i slid down snow,  
hundreds of flowers bloom;  
avalanche lilies, numerous  
as wordsworth's daffodils.

—Dennis Fritzing

forest? Climbing into the cab he turned, shook my hand, and said: "That was fun!" He asked how much it would cost to make a difference. I said about two million. As the cab took off he leaned out the window. "I'll call you in a few weeks. Let's go see more trees!"

The story is not told, nor the journey over. There is conflict and resolution aplenty for the epic we are living. For those who are called to the Biosphere's "burning bush," each odyssey is a classic quest, a hero's tale, bid in search of a guiding myth; and we must return to our global village with a sustaining vision. The search for the ancient biocentric paradigm is our common crusade. The responsibility is ours. There is no age that can guide us. The Indians, great past stewards of this Western

Hemisphere, felt that no council was complete unless someone spoke for the seventh generation. For over 200 years, since this land was stolen by the savages from Europe, no council has been complete.

Dim instinct, tearful experience, and original innocence must inspire our present journey. We go where none has gone and there is no one here who is not now called to lead. We are the seventh generation.

*Ancient Forest International is seeking funds to help create an ancient forest park in Chile. Please send tax-deductible donations to AFI, POB 1850, Redway, CA 95560.*

# American Serengeti

Thunderbear

*ed. note: The following is from the December 1990 issue of PJ Ryan's underground National Park Service newsletter, Thunderbear. To subscribe, send \$12 to POB 71621, New Orleans, LA 70172-1621.*

by PJ Ryan

You should all see Kevin Costner's *Dances With Wolves*.

First of all, it is a good movie; not a great movie, mind you, but a good movie which will keep you entertained and reluctant to go to the toilet for three solid hours; very few epics can make that statement.

Most of the criticisms of the film are correct; the plot has more holes in it than a prairie dog town. The Sioux just were not that universally lovable, anymore than the Pawnee were universally evil, or the Whites (with the exception of Kevin Costner) that universally slobbish, corrupt and greedy. The camera crew seem to have edited out the time of year in South Dakota when it is Really Hot, or Really Cold or Really Windy, which anyone born and bred in the Dakotas will tell you is a good chunk of the calendar.

Still, the acting is pretty good, in several cases very good. The plight of the plains Indians is depicted movingly, and the use of the Lacotah language is an effective, even brilliant touch.

Most of all, the photography is awesome.

The High Plains, the Serengeti of North America, have never been so magnificently photographed in any feature film or documentary. Never has an Indian Buffalo hunt been so effectively captured on film.

The viewer has the distinct feeling that he/she is seeing the High Plains through the eyes of Catlin or Bodmer. This is the way it must have been on the American Serengeti in the first half of the 19th century.

They would all be there, not just the horses and Indians and Buffalo, but all the living mosaic of the High Plains: wolves, lots of them, Elk, Pronghorn, deer and Grizzly Bear (Lewis and Clark didn't see any bears in the mountains, but they saw lots of Grizzly on the High Plains, too many as far as they were concerned), and also all the little things: Black-footed Ferret, and weasels and Badger, and

cottontails and jackrabbits, and the hawks and eagles that impressed the the plains Indians so much, and the sky-filling flocks of waterfowl. You may not have seen them all in *Dances With Wolves*, but you had the feeling that they were all there for the counting, just over the ridge.

The curious thing is that they might all come back.

Kevin Costner observed that we really don't seem to need the High Plains after all. The very reason he was able to make his movie was that there are large portions of South Dakota and the High Plains in general that are nearly as empty as when George Catlin took his paintbox up the Missouri River.

Now this is not to say we didn't try. In the 19th century, Mr. Hill, President of the Great Northern Railroad, had some scientists that were willing to testify that "the rain follows the plow," that is, exposing 160 acres of plowed up Dakota plains to the sky would somehow make it rain. Mr. Hill, of course, had a number of 160 acre parcels to sell.

Little towns sprang up to service the wretches slowly going broke in their frame shacks. After one or two good harvests, the land went back to grass and cattle and some of the little towns managed to hang on and even grow a bit.

There was some hopeful talk of "industry" to make the Northern Plains "grow," completely ignoring the exquisite illogic of sending raw materials to be manufactured in an area where there was no large population base and hence no ready market. Even offering companies pathetically low wages and "right to work" anti-union laws was ineffective, as dear Old Dixie could offer the same plus mild to non-existent winters which keep the costs of heating and snow removal down.

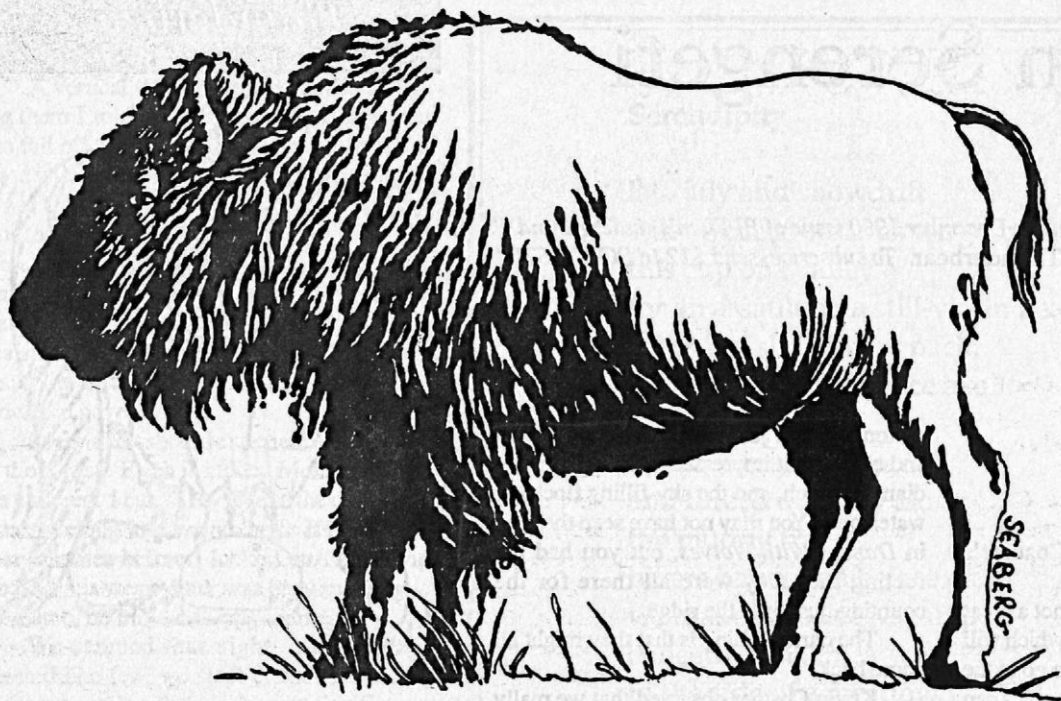
After the boom years of shortly before and during the First World War, the populations of the Northern Plains, Southeastern and Eastern Montana, the Western Dakotas, Western Nebraska, Eastern Wyoming, and Northeastern Colorado became stagnant or actually began to decline. (Paul Ehrlich and



other zero population people should immediately move to Lodgepole, South Dakota, as it is obviously the new promised land!) Unlike the Pacific Coast, the Northern Plains simply did not fill up with people (John Muir could never figure why his favorite sister and her family chose to homestead in Nebraska rather than continue on to California). Apparently the idea of "free" land was as potent in the 19th century American Plains as it is today in the Brazilian rainforest—with the same sad results. A few good crops and then the land stopped producing or the inevitable drought occurred. (Actually, it is unfair to complain of "drought" on the High Plains as it is to complain of rain in New Orleans; that's just the way the climate is set up.)

Since 1830, according to the October issue of the Magazine of the Royal Geographical Society, many counties in Nebraska have suffered a 50% population loss, and presently there are four people or less per square mile, many of them elderly and 20% living in poverty. According to the Farmers Home Administration, 26% of its property loans were delinquent in South Dakota and 42% in North Dakota. The Royal Geographic Magazine quotes one person on a recent hunting expedition in North Dakota's West River country as saying, "We drove for miles and miles over trails and isolated roads. Where there were families on the land 20 years ago, there are dozens of abandoned ranches and farmsteads. It was rare during the two days we spent in the region to come upon an occupied farm or ranch. Pheasants, deer, antelope, coyotes, an occasional bald eagle, not many people, fewer every year."

*continued next page*



Is there anything that can be done?

Well, yes, buckaroos. Dr. Frank Popper of Rutgers University has an idea. He believes that the federal government should buy up all the ranches and farms in the High Plains states and let the land return to its natural status as a Buffalo Common. Buffalo would require no winter feeding, having evolved on the High Plains (unlike Hereford cattle) and would be cheap to raise. After all the barbed wire fences are taken down, they would simply track hundreds of miles in a slow migration, and the surplus could be killed for meat and hides.

Although the Royal Geographical Society credits Dr. Popper with this "revolutionary" idea, it is actually quite old—and came within a hair's breadth of becoming reality. In the early 1870s, one of our most eminent scientists, John Wesley Powell (of Grand Canyon fame), decided that the High Plains should not be farmed, but rather both the Buffalo and the Plains Indians should be retained in place, with the Indians being offered as much civilization as they felt they wanted in return for harvesting some of the Buffalo for the White Market. Powell (who understood his Indians) suggested the Indians could pick up what cash they needed working seasonally in meat processing plants that would be established on the edge of the plains. Powell believed his plan would avert war and confrontation with the Indians, preserve the Buffalo and High Plains ecosystem, prevent erosion and supply the US with a reliable stream of cheap protein. Congress thought it was a good plan and passed it, only to have it vetoed by President Grant. The rest, as they say, is history. In the very

near future, we are going to have to look at some variety of John Wesley Powell's National Grasslands, whether we like it or not, and steps should be taken so that this time around, all species and all interests benefit.

But wait, you say! Should not "free enterprise" find a solution to this problem? Well, buckaroos, I reckon it could, but I reckon that the "solution" would be called the Mitsubishi Land & Cattle Company or some such variant.

Actually, no one who wanted to remain on the proposed High Plains Preserve would be forced to sell out or leave. They could keep or sell their land as they saw fit, the only changes being that the barbed wire fences would come down. If their land would normally carry, say, 500 Herefords, it would probably carry around 600 Buffalo, and they would be identified as the proud owners of 600 Buffalo, and would get paid for the surplus increase that was harvested. It is entirely possible that some years there would be not a solitary Buffalo on their property; other years, thousands. It wouldn't matter; the ranch owner would still get his percentage from the general herd, running into the millions. Exactly what would the "rancher" do then? Well, he would basically be in the hunting and packing business; managing wildlife in cooperation with us federals and guiding people on deer, antelope, bear (Yup, Grizzly, Old Ephraim, partner), waterfowl, and upland bird hunts. Not a bad life, partner. There would probably be more money per carcass in hunting Buffalo than simply "harvesting" them, and if the hunt were done in the Plains Indian manner, as

graphically shown in *Dances With Wolves*, such a hunt would be, to put it mildly, a memorable experience.

And what of the Plains Indian? Would they revert to Noble Savagery and ride off to lead lives of pre-white arcadian bliss?

Well, not exactly, buckaroos. If you remember in *Dances With Wolves*, it seems that the Sioux only lived in South Dakota during periods of golden autumnal sunsets and sunrises. The film's director, Kevin Costner, decided to skip the other six months, where the wind chill factor keeps the temperature at a steady 40 below zero and you huddle in your teepee stringing beads, telling stories and hoping the dried meat holds out. The

modern Plains Indian will probably want to skip this part too, and concentrate on the fun part—the Buffalo hunt, the sun dance, the vision quest, tribal rendezvous with teepees on the Grand River bottoms for a few weeks when there is that soft, magical, autumnal golden glow about the High Plains, and then return to a job with central heating and a personal pension plan. Not a bad combination.

## T-SHIRTS



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# BOOK REVIEWS

## Readings

### PANTHER

by Roger A. Caras, illustrations by Charles Frace; written 1969, reprinted 1990 by U of Nebraska Press, 901 N 17th St, Lincoln, NE 68588; \$7.95/paper.

The first thing one notices about *Panther* is that it is dated. Even if you miss the date of the copyright, within two pages you are swept into a lush world of Florida Everglades teeming with wildlife; a fantasy that exists today only in scattered remnants of a glorious past.

At first this put me off — is this a history book, or what? But Caras draws you in, makes you believe he has lived with and studied these animals, shared their most intimate behaviors. The story is ostensibly about a Panther. But along the way we feel a part of the vast and beautiful land they rule.

Today only about 30 Florida Panthers survive in the wild, and the Everglades is a dying ecosystem. Once home to millions of birds, the Everglades' bird populations have plummeted. Wading birds have undergone declines of up to 90%. Thousands of acres burned last year, dried out by drought and drained of 90% of the natural water supply by federally subsidized sugar farmers.

*Panther* tells us none of this. *Panther* is the story of the Everglades Ecosystem as it was, as it should be, as we are fighting to make it again. It is important to keep this vision in sight, to prevent us from being content with just "preserving" what is left. *Panther* serves that purpose.

*Panther* is also the story of Panther hunters, those who saw the lion as a "coveted big game trophy," and those who would cage them in side shows, or hunt them down with hounds for \$25 a head. It is sobering to think that this was an accurate portrait of Everglades life when this book was written, just 21 years ago, or that the amount of wildlife could have declined so precipitously since then.

Caras is at his best when he takes us into the backcountry, showing us scenes we will never see in "Wild Kingdom," almost putting us inside the minds and emotions of these awe-inspiring predators. A Panther, he tells us, even at one-quarter the size of a Tiger, can kill and drag a thousand pound horse up a ravine, or carry a fifty pound colt for three miles before

tiring. Solitary animals, Panthers come together in a mating ritual which Caras describes in fascinating detail:

*And so began the cat-and-mouse game ... of disinterest and disdain. They were never out of reach of each other's signals, never really very far apart, but she wouldn't acknowledge him and he would hardly have let it be known that his very being was swelling and aching for the want of her. What actually was the inbred caution of the predatory animal, an outcast in every society, appeared to be supreme ego, but that was only a facade, as is so much of what man believes to be his understanding of the cat family, animals that cannot really be understood at all.*

We follow the pregnancy to birth; the mother eats the cub born deformed. The male cub who remains (we only know him as Panther, Caras wisely not trying to personify or domesticate him with a name) lives an exciting life. He watches fierce battles between his mother and a large Alligator and then an even larger Black Bear. At 18 months Panther is unwillingly weaned, and goes on to his own adventures. He runs from a brush fire, seeks a mate, survives a hurricane, and gets bitten by a rattlesnake. But not surprisingly, in the end it is man with whom he has his ultimate confrontation.

The plot is almost incidental in this book, merely a vehicle by which Caras shows us around the Everglades and introduces us to its cast of characters. Yet the story of everyday life in the wilds is captivating. *Panther* preserves an image of that life at a time when it is in danger of disappearing.

As a wildlife story, the book is well written, informative, and interesting. But it is not radical or environmental literature. There is no indication that the way of life portrayed is in danger, nor any mention of the debilitations that have taken place since the book was written. There could have at least been a postscript, or an introduction to the second printing, indicating the changes that have occurred. As it is, the book would make a great assignment in a high school biology class. Just be sure to mention that the tidy balance of nature it portrays is no longer really all there.

—Reviewed by Henry Lee Morgenstern.

### TOWARD A TRANSPERSONAL ECOLOGY: Developing New Foundations for Environmentalism

by Warwick Fox; Shambhala, Boston; 1990; 380 pp. \$16.95/paper.

This is a very important book for students of ecophilosophy. Warwick Fox, along with his colleague, Robyn Eckersley, is at the Centre for Environmental Studies at the University of Tasmania. Yet even from this seemingly remote location, he manages to display an encyclopedic knowledge of the international deep ecology movement, citing everything from academic journals like *Environmental Ethics* (to which Fox and Eckersley are important contributors), to anarchist sheets like *Kick It Over!*

Although the title may not indicate it, Fox is one of the most important deep ecology theorists working today. The back of the book includes endorsements by Bill Devall, George Sessions, Alan Drengson, Paul Ehrlich and others. Fox covers the movement away from human-centeredness, "From Silent Spring to Deep Ecology," traces the substantial influence deep ecology has had on ecophilosophy as a whole, some of the criticisms it has drawn, then moves on to a lengthy discussion of deep ecology itself and some of the possible shortcomings of that label.

The gist of this section is that Arne Naess didn't mean for "deep ecology" to be used in the popular sense, but simply as a term for "asking deeper questions." Fox suggests that since deep ecologists such as Bill Devall and George Sessions have already discarded the "shallow ecology" pole of the deep/shallow distinction in favor of the less pejorative "reform ecology," perhaps we ought to say "farewell to deep ecology" as well.

While I agree with Fox when he says that "ecocentrism" is probably the most concise way to sum up what anti-anthropocentric philosophers are discussing, I found myself less convinced of the term he suggests, "transpersonal ecology." Nevertheless, Fox is able to assemble a stunning array of evidence that the "Extended Self" orientation is indeed the direction deep ecology has been moving

*continued next page*

in all along, with quotes from Naess, Sessions, Devall, Joanna Macy, John Seed and others to this effect. Here is Arne Naess:

Now, my point is that perhaps we should in environmental affairs primarily try to influence people toward beautiful acts. Work on their inclinations rather than morals. Unhappily, the extensive moralizing within environmentalism has given the public the false impression that we primarily ask them to sacrifice, to show more responsibility, more concern.... All that can be achieved by altruism—the dutiful, moral consideration of others—can be achieved through widening and deepening ourselves. ...

One learns more from people who are superb in their capacity of acting benevolently by inclination than from people who are masters in acting morally, but against their inclinations. ...

*The history of cruelty inflicted in the name of morals has convinced me that increase in identification might achieve what moralizing cannot: beautiful actions.*

As a Scotch Calvinist by heritage, I started out skeptical of Fox and Naess's arguments, and ended up about 85% convinced. Perhaps I am unnecessarily fixated on people "showing more responsibility" for Earth ethics; certainly the cynic in me cannot help but conclude that people are more likely to act benevolently if

they feel they have something to gain from it, rather than if they are simply asked to make a sacrifice. Jimmy Carter took the latter approach during the energy crisis of the 1970s, and his popularity plummeted like a rock.

Still, I find the term "transpersonal ecology" somewhat troubling, even if it is the best way to express what Fox is getting at. First, it carries — at least to my mind — something of a "new age" flavor. This coupled with the fact the book is published by Shambhala could add fuel to the fire of critics like Alston Chase and others who already gleefully (though wrongly) conclude deep ecology is a new age movement.

Those who do not yet fully understand the manifold differences between deep ecology and new age thought ought to reread George Sessions's excellent "Deep Ecology, New Age and Gaian Consciousness," *Earth First!*, 9-87.

Second, I may be old-fashioned, but I never saw anything wrong with the deep ecology/shallow ecology distinction, and thought it served its purpose well. There is something unsettling about all this hand-wringing over implying somebody else's position might be shallow, after the last several years during which deep ecology has weathered the most astonishing misrepresentation and slander campaign (with the ubiquitous comparisons to National Socialism, etc.) of the late 20th century. Certainly I would give deep ecology theorists credit for conducting themselves in a manner a thousand times more honorably than their detractors, but I person-

ally would be inclined to cleave to the deep ecology label even more formidably, if from sheer stubbornness alone. Luckily, I am not a deep ecology theorist!

I hope Warwick Fox will take these friendly criticisms of his erudite and essential work as they are intended. And I will save the last word for him.

*Although the positive aspects of personally based identification are praiseworthy and fundamental to human development, the negative aspects that go with exclusive or primary reliance upon this form of identification (myself first, my family and friends next, and so on) are costing us the Earth ... transpersonal ecologists emphasize the importance of setting personally based identification firmly within the context of ontologically and cosmologically based identification. ... In terms of politics and lifestyles, the latter, transpersonal forms of identification are expressed in actions that tend to promote the freedom of all entities to unfold in their own ways; in other words, actions that tend to promote symbiosis. Actions of this kind include not only actions that consist in "treading lightly" upon the Earth but also actions that respectfully but resolutely attempt to alter the views and behavior of those who persist in the delusion that self-realization lies in the direction of dominating the Earth and the myriad entities with which we coexist.*

—Reviewed by Bill McCormick

# NOTEWORTHY ARTICLES

by John Davis

"Wild Animals and Human Life," by Mark Braunstein et. al., *The Trumpeter: Journal of Ecosophy*, fall 1990. "This issue of *The Trumpeter* is dedicated to wild animals ... Mark Braunstein served as guest editor ..." It includes articles by David Abram ("Animal Thinking"), Mark Braunstein ("How Human Food Choices Affect Wild Animals"), Canadian wildlife biologist John Livingston, Jim Nollman ("Ant Communication"), Lance Olsen ("The Cognitive Complexity of the

Grizzly Bear"), environmental educator Michael J. Cohen, Karen Davis, and *Trumpeter* Editor Alan Drengson. Canada's leading ecosophy journal is not available in most US libraries, unfortunately, so here's the address: The Trumpeter, PO Box 5853, Str. B, Victoria, BC Canada V8R 6S8.

"Mercury Rising: Government Ignores the Threat of Mercury from Municipal Waste Incinerators," 9-90, a report published by Clean Water Action, 1320 18th St. NW, Washington, DC (202) 457-1286; principal authors Robert Collins & Henry Cole, PhD.

This report shows that municipal waste incinerators, coal-fired power plants, and factories are poisoning aquatic wildlife, and to a

lesser extent terrestrial wildlife, with mercury. Simply reading the executive summary of this essential and alarming document will leave you with no doubt that threats from incinerators and power plants are wilderness issues, even when the offending facilities are in urban areas. Several recent Florida Panther deaths appear to be attributable in part to mercury poisoning from incinerators.

"Kodiak: Death of Bear Refuge?" by Tim Richardson; *Bear News*, Winter 1990-91. "Washington politics can make or break the future for Kodiak National Wildlife Refuge." Great Bear Foundation devoted its winter issue of *Bear News* to the bears of Canada and Alaska; "Kodiak" is the lead article in that fine issue. (For a free copy of the issue, write GBF, POB 2699, Missoula, MT 59806. See also the GBF report in this issue of *Wild Earth*.)

## Readings

The article describes a dire threat to bears that is receiving far too little attention. While conservationists necessarily devote considerable attention to the imperiled Arctic National Wildlife Refuge, another big Refuge in Alaska, Kodiak, may soon lose some of the most productive Brown Bear habitat in the world. As a result of a disastrous piece of legislation passed in 1971, the Alaska Native Claims Settlement Act, Native Americans own huge inholdings in the Refuge which they have little choice but to develop or lose. Congress should buy the in-holdings but is not being heavily pressured to do so.

"Gap Dynamics of Old-Growth Eastern Forests: Management Implications," by James Runkle; *Natural Areas Journal*, 1-91. Many Eastern forests are characterized by frequent small-scale disturbances—gaps, such as result from tree falls. This article shows that gaps are essential to the diversity of many forests and that mimicking the gap dynamics of an old-growth forest may not be possible in a managed forest.

"Reefs and the Greenhouse Effect: Will Corals Go with the Flow," by Lauren Wenzel; *Endangered Species Update*, 1-2/91. This article explains why the oceans' richest ecosystems—coral reef communities—may be among the first casualties of global warming. World-wide bleaching of corals twice in the late 1980s suggests that warming seas are already adversely affecting reef-building corals.

"Trouble in the Heartland," by Andy Mahler; *Forest Watch*, 2-91. "The public forests of the Midwest have recovered from a century of abuse. Now the Forest Service wants to return them to intensive timber production." Andy Mahler co-founded a coalition, Heartwood, devoted to saving the hardwood forests that he skillfully describes in this article. *Forest Watch* is the magazine of Cascade Holistic Economic Consultants (POB 3479, Eugene, OR 97403), a group founded by forest economist and arch critic of the Forest Service, Randal O'Toole.

"Can organisms direct their evolution?" by Anna Maria Gillis; *BioScience*, 4-91. "Biologists are rethinking this question in light of recent findings that challenge the randomness of bacterial mutations." This is a welcome and overdue article for those naturalists and dabblers in biology who have long thought that strict neo-Darwinism is counter-intuitive and violates Occam's razor. The article explains how evolutionary biologists are finally overcoming the decades-old taboo against discussions of directedness and intentionality in evolutionary change, which were silenced earlier this century when experiments appeared to prove that selection acts entirely on variants produced by random mutations.



"Northwest salmon at the crossroads," by Pat Ford et. al.; *High Country News*, 4-22-91. *HCN* (Box 1090, Paonia, CO 81428) has done conservationists a great service with this series of articles. The various authors provide detailed accounts of why the Pacific Northwest's salmon runs have fallen from over 15 million wild, vigorous fish of 5 species and more than 300 stocks before the European invasion of North America, to under 1 million genetically-tainted fish of about 200 stocks. The authors explain the controversies surrounding the proposed Endangered Species listing of the Snake River Sockeye Salmon, Snake River spring, summer, and fall Chinook, and lower Columbia Coho. Oregon's powerful US senator Mark Hatfield looks likely to be an enemy to conservationists on the Northwest hydropower vs. salmon issue even as he has been on the Northwest clearcutting vs. owl issue, so we must learn the facts and force Congress to listen to them rather than him.

"Oil and Overpopulation: A Volatile Mixture," *Balance Report*, 4-91. *Balance Report* is the newsletter of Population-Environment Balance (1325 G St NW, Suite 1003, Washington, DC 20005), which regularly reports on issues and legislation pertaining to overpopulation. "Oil ..." is one of the few articles to discuss the overpopulation crisis underlying the recent oil war, and the problems that crisis is likely to engender as the Middle East's human population grows 2.8% a year (compared to 1.8% worldwide).

*A Tale of Two Subsidies*, by Keith Hammer (3165 Foothill Rd, Kalispell, MT 59901); 5-91. This booklet alerts citizens to the Forest Service's ecologically and economically bankrupt road-building and timber harvesting practices by describing two particularly disastrous projects on the Flathead National Forest: the Bent Flat and Sunset Beaver Roads. After explaining how the FS spent taxpayer money to build roads into prime Grizzly habitat even though the agency couldn't sell the timber, Keith tells readers how to oppose the FS's road-building mania. Give copies of this booklet to your conservative friends; Milton Friedman himself would lambast the FS after reading it.

"Abolish the Recent," by Stephen Jay Gould; *Natural History*, 5-91. "According to the geological clock, we are still in the throes of the Ice Age." Gould's column, "This View of Life," is as thought-provoking as any in the natural history field. Gould is the leading proponent of the punctuated equilibrium hypothesis (speciation occurs in spurts), and a renowned paleontologist. In this article he presents an argument sure to please Luddites: The "Recent" epoch is a fiction—a result of human hubris, our obsession with the present, and our failure to view life from a geological perspective. We needn't go back to the *Pleistocene*; we are still in it. In characteristic fashion, Gould weaves together multitudinous and diverse subjects to create his artwork: the overkill hypothesis (which he treats perhaps not altogether ingenuously here), the greenhouse effect, bivalve paleontology, and other matters that keep us awake at night wondering...

"Where the Sea Meets the Sky," by John Hardy; *Natural History*, 5-91. "The vital surface habitat of the oceans—although only inches thick—is filled with nutrients, living organisms, and increasingly, pollutants." People fighting pollution should avail themselves of the incoming information showing the oceans' skin to be biologically diverse, chemically rich, physically cohesive, and anthropogenically imperiled to a greater extent than scientists thought possible until recently.

"Carrying Capacity Selections," *Focus*, spring 1991. Carrying Capacity Network (1325 G St. NW, Suite 1003, Washington, DC 20005; \$35/yr), an activist network influential in effort to stop the human population explosion, recently released the first issue of "a publication for those interested in the carrying capacity limits of our resources and how sustainable use of them can be incorporated into US public policies." The first issue includes excellent articles by Drs. Marcia & David Pimentel (authors of the little-known but extremely useful *Food, Energy, and Society*), Sandra Postel (a Worldwatch Institute researcher), and Drs. Anne & Paul Ehrlich (authors of *The Population Explosion*, perhaps the best book on that subject yet written). The Pimentels' article was originally published by another fine group devoted to stemming the overpopulation crisis: Negative Population Growth (POB 1206, Teaneck, NJ 07666; \$25 annual dues), which publishes the occasional *NPG Forum*.

"War on the Environment: Environmental Consequences of Bio-Chemical Weapons Could Be Catastrophic," by Jack Rosenberger; *E Magazine*, 5-6/91. One of the many distasteful facets of the recent oil war that has been overlooked by the mainstream press is

*continued next page*

the likelihood of ongoing ecological damage resulting from the bombing of Iraq's 31 biological, chemical and nuclear weapons plants. Says this article, "One environmental side effect of the allied air strikes may be the largest dose of biological and chemical warfare agents ever released into the atmosphere." Toxins, viruses, and bacteria released by the bombing of these plants could contaminate ecosystems in the Persian Gulf region for years.

"Keeping anglers happy has a price: Ecological and genetic effects of stocking fish," by Billy Goodman; *BioScience*, 5-91. This article concisely explains many of the adverse effects of stocking fish (and thus, indirectly, of stalking fish). They include spread of disease, displacement of natives by exotics, genetic contamination, and disruption of intraspecific behavioral patterns after hatchery fish of the species are introduced. In the East, introduced fish now generally comprise 5-10% of a state's fish species; for most states in the West, over 25% of the fish species are exotic.

"Conserving Biodiversity in Managed Forests: Lessons from natural forests," by AJ Hansen et. al.; *Bioscience*, 6-91. The authors of this article are Forest Service biologists and a forestry school professor, so their perspective is not that of conservation activists. Nonetheless, they provide documentation that can lend support to conservationists' contention that all native forests should be preserved. Their article makes clear that it is not so much old-growth *per se*, but natural forests that we want to preserve. Old-growth forests are not necessarily more diverse in species than young natural forests (those arising after natural disturbance). The important distinction is not between old-growth and younger age classes, but between natural forest and managed forest.

"The Big Cut," by Joel Connelly; *Sierra*, 5-6/91. Sierra Club's magazine explains here the desperate plight of the forests of British Columbia—where the trees are being clearcut at an even faster rate than in the US Pacific Northwest. Given Canada's lack of environmental laws, its tree farm license system, and its industry-controlled government officials, the best chance for remaining old-growth north of the 48th parallel may be international pressure.

"Don't Worry, Plant a Tree," by Ted Williams; *Audubon*, 5-91. National Audubon Society's magazine provides here a much needed warning against careless tree planting. Gifted columnist Ted Williams raises his cleaver and lets it fall on the American Forestry Association, National Arbor Day Foundation, Global ReLeaf, and other groups and programs capitalizing on America's sudden liking for trees. Excepting a few careless remarks (e.g., Grizzlies in Yellowstone "are doing better every year"), Williams effectively and humor-

## Earth Day 1991

In an argument once a friend asked me,  
"Why must we save the eagles?"

Siding with ranchers who'd shot the bird as predator  
for stealing two or three (a percentage) of their sheep.

"A man has to eat," he insisted.  
Unbalanced, mind reeling, meat lashed

to the barbed wire of his words, I fell silent,  
hearing only the thrashing of wings on his lips.

And it wasn't until later, in the aerie of my room,  
that an answer arose from deep within me,

riding the thermals of genetic wealth.  
As potlatch becomes compost & enriches the earth,

each adds a blanket to the heap.  
"Friend, friend, to save ourselves."

—Cloud Acre

ously shows the ecological ignorance underlying many tree planting efforts—which could leave much of North and South America covered by eucalyptus trees and other aliens.

"Yellowstone: We Must Allow It to Change," by Holmes Rolston III; and "Yellowstone: The Erotics of Place," by Terry Tempest Williams; *High Country News*, 6-3-91. A philosopher, and a naturalist and storyteller offer two very different but complementary views of an ecosystem in flux. Holmes Rolston effectively defends the concept of *natural*, as opposed to human-imposed, against Alston Chase's contention that the natural and the humanized are inseparable in Yellowstone. Terry Tempest Williams uses the Yellowstone Ecosystem to show that an "Erotics of Place, a politics of place, is emerging."

"Life List, USA," by Liz Boussard; *Wilderness*, summer 1991. An antidote to unwarranted optimism, here is the 1991 list of Endangered and Threatened species in the United States (over 500), with descriptions of

some of the more charismatic of them. Not listed here are the 4000 or so species in the US thought to be biologically endangered but not listed by the sluggardly and niggardly US Fish & Wildlife Service. Not pictured, alas, are the White Wartyback Pearly Mussel or any of the too oft-forgotten gastropods.

"Help for Migratory Bats," *Bats*, summer 1991. The beautiful quarterly magazine of Bat Conservation International (POB 162603, Austin, TX 78716-2603) often offers a refreshing change from the stories of gloom and doom that perforce pervade the pages of most preservation periodicals. Much of the news in *Bats* is good! Since many bat species are victims of overkill more than of habitat destruction, BCI is enjoying success at slowing or even reversing bat population declines at many sites. This article describes BCI's work with Mexican biologists on behalf of bats that cross our borders.

# ANNOUNCEMENTS

## LIFE NET

Life Net is a new nonprofit organization set up to promote the conservation of biological diversity and wildlife abundance through grassroots action. Approaches include education, research, legal/political advocacy, and economic and lifestyle reform. Citizens, professional groups, civic groups, businesses, private clubs, etc. wanting direct involvement in the protection of endangered species and habitats should contact Tony Povilitis or Jim Fish, Life Net, POB 712, Placitas, NM 87043.

## NORTHEAST REGIONAL JAMES BAY ACTION CONFERENCE

The Northeast Alliance to Protect James Bay, the Ithaca Area James Bay Defense Coalition, PAW and other groups are organizing a conference on James Bay, to be held 4-6 October 1991 at Cornell University in Ithaca, New York. It will focus attention on the effects and potential effects of Hydro-Quebec's existing and planned dams on the wildlife and Native Americans in the James Bay region. Highlights include these: 10-4: press conference, rally, benefit concert with Alice DiMichele and Dana Lyons; 10-5: lectures and workshops; 10-6: David Brower speech. The conference will be two months before New York and Vermont will, if not dissuaded, irreversibly commit to the purchase of energy from Hydro-Quebec. Come help stop the destruction! For information send a SASE to Northeast Regional James Bay Action Conference, 300 Caldwell Hall, Cornell U, Ithaca, NY 14853; or call 607-539-6428.

## NATURAL AREAS ASSOCIATION

The Natural Areas Association has two conferences coming soon: Management of White-tailed Deer in Midwestern Natural Areas (Aug 7-8, Champaign, IL), and Natural Areas in the Western Landscape (Oct 15-18, Estes Park, CO). For information, see Natural Areas article in this issue. Also write Deer Management Workshop Coordinator, 100 First National Bank Plaza, Suite 10, Chicago Heights, IL 60411; and Natural Areas Conference Coordinator, POB 260550, Lakewood, CO 80226.

## JOHN SEED TOUR

John Seed will be performing music, offering Councils of All Beings, and teaching in the US beginning in late August. For a copy of his schedule, write Rainforest Info Centre, PO Box 368, Lismore, NSW 2480 AUSTRALIA.

## PRESERVE APPALACHIAN WILDERNESS CONFERENCE

Virginians for Wilderness will sponsor a Preserve Appalachian Wilderness (PAW) conference at James Madison University's Chandler Hall in Harrisonburg, VA, September 14-15, 1991. The conference theme is *Returning Big Wilderness and Sanity to the Appalachians and Beyond, Strategies and Actions*.

A partial list of conference participants includes Jan Lundberg of Alliance for a Paving Moratorium, poet Gary Lawless, PAW activist Jeff Elliott, noted ecologist Dr. Reed Noss, Professor Robert Zahner, and PAW founder Jamie Sayen. Activists from the Southern, Central, and Northern Appalachians are urged to attend.

Camping is available at Hone Quarry and other campgrounds in the George Washington National Forest. For maps and a campground list, write the GWNF, POB 233, Harrisonburg, VA 22801 or phone (703)433-2491.

Hotel accommodations include Howard Johnson's off I-81, exit 63 across from JMU (800-654-2000; locally 703-434-6771); and Days Inn, off I-81, exit 63 (703-433-9353).

Conference fee is \$10 if preregistered or \$15 at the door. Please make checks payable to Virginians for Wilderness and send to R.F. Mueller, Route 1, Box 250, Staunton, VA 24401; (703-885-6983).

## BIODIVERSITY AND THE GREATER NORTH CASCADES ECOSYSTEM

Greater Ecosystem Alliance of Bellingham, Washington will be hosting a three day conference from October 18-20, 1991. The event will concentrate on strategies for conservation of fully functioning ecosystems and will feature presentations and workshops on landscape ecology, ecosystem law, wild salmon, grizzly bears, ancient forests, tribal perspectives, and

transboundary issues. The conference will take place at the Mountaineers Building in Seattle and cost is \$35. For more information and to register contact Mary Cutbill at GEA by phone (206) 671-9950 or in writing at PO Box 2813, Bellingham, WA 98226.

## INTERNATIONAL ASSOCIATION FOR LANDSCAPE ECOLOGY

The International Association for Landscape Ecology, IALE, represents about 3500 professional ecologists, geographers, planners, architects, hydrologists, and agriculturalists from over 25 national and regional groups globally. Members are united by professional interests in research, planning or management of heterogeneous environments, with special attention to spatial aspects, often at moderate to large scales (the landscape scale), and often with human influences as a major environmental variable. Specializations of these landscape ecologists range from ethics and aesthetics through nutrient movements in groundwater to interactions of disturbances, dispersal of organisms and extinction of their populations.

IALE held the World Congress of Landscape Ecology 1991 in Ottawa, Ontario, July 21-25.

For more information, contact Gray Merriam, Dept. of Biology, Carleton University, Ottawa, Ontario, K1S 5B6, or phone (613) 788-3859.



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## *The Wild Rockies: Ecological Paradise or Environmental Holocaust?*

The Wild Northern Rockies, the last major wildland region south of Canada, contains all the native species that were here at the time of the Lewis & Clark Expedition. The largest remaining tracts of native forest and biodiversity are found here, including populations of grizzly bear, gray wolves, woodland caribou, anad-

However, this threatened region is in great danger. The United States Forest Service roadbuilding targets for the Wild Rockies are the highest in the nation, with over 70,000 miles of destructive and costly logging roads planned. Rampant deforestation and habitat destruction are occurring as a result of taxpayer-subsidized below-

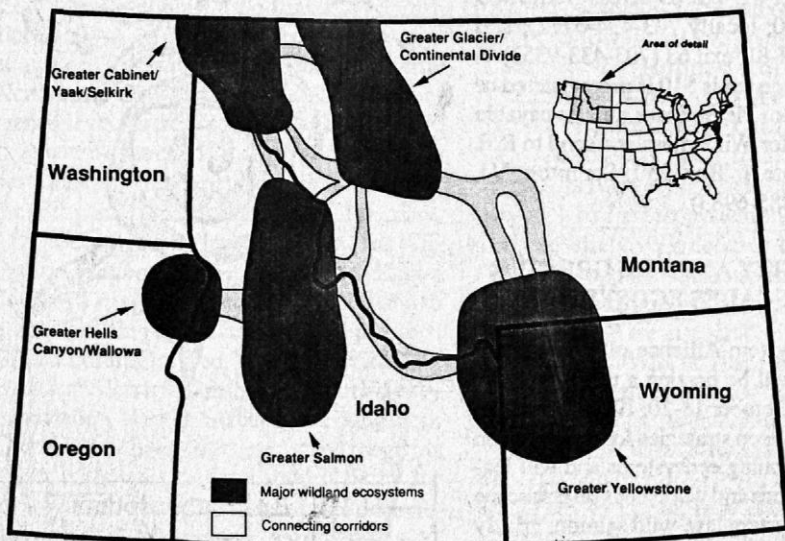
### *Yellowstone & Glacier Ecosystems in peril!*

mous salmon and trout, ancient forests, and a host of lesser known species. In fact, the largest intact forest ecosystems in the Earth's temperate zones are found in the Wild Rockies.

cost logging and massive clearcutting. Extensive habitat fragmentation threatens the world-class wildlife and fisheries and native forests of the Wild Rockies.



***"We're counting on you to defend our common future"***



U.S. portion of the Northern Rockies Bioregion, its five major ecosystems and connecting corridors  
© 1991, Alliance for the Wild Rockies, Missoula, MT.

The Alliance for the Wild Rockies formed to meet this challenge. We're 125 organizations, business owners, and thousands of individuals taking an ecosystem-based, biological approach to protect and restore this great region. Our proposal, the Northern Rockies Ecosystem Protection Act, is a national approach that would protect over 15 million acres of pristine roadless lands and wild rivers. These lands belong equally to all Americans.

We need the help of dedicated conservationists like you to make permanent protection of the remaining biodiversity in the Wild Rockies a reality. Please join with us today. Memberships between \$15-\$50 are available with funds going towards good old grassroots activism and advocacy. Contributions are tax-deductible.

**Alliance for the Wild Rockies**  
P.O. Box 8731  
Missoula, MT 59807  
or call 406-721-5420