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Looking south from Mt. Clarence King, Sequoia-Kings Canyon Wilderness Photo by Pete Yamagata

Hikers win lawsuit on Sequoia-Kings Canyon stock numbers

By Lucy Rosenau

How big is the difference between 20 and 25? For the High Sierra Hikers Association, it's been more than four years and thousands of dollars. That's what it took for the hikers' group to stop the National Park Service from raising the limit on stock animals in the backcountry of Sequoia-Kings Canyon National Park.

The Park Service changed its party size limits—the maximum number of people and stock animals usually allowed to travel and camp together—so groups could travel more easily through neighboring Sierra wilderness areas, including Sequoia-Kings Canyon. Before 1991, when the Forest Service and Park Service adopted a uniform party size limit of 15 people and 25 stock for 15 wilderness areas in the central and southern Sierra Nevada, planning a trip that passed through more than one wilderness could be frustrating because different wildernesses had different regulations.

Well-intentioned as it was, the adoption of a uniform regulation on group size allowed an increase in the number of stock animals—horses, mules, burros, and llamas—that could travel together in the wilderness of Sequoia-Kings Canyon National Park, where a limit of 20 animals per party previously had been in effect. (The Park Service's adoption of uniform standards also lowered the number of people in a party, a decision the hikers' group did not challenge.)

Concerned that larger numbers of stock would harm the fragile high country of the national park and detract from the experience of hikers, the High Sierra Hikers Association filed a lawsuit charging that the Park Service's 1994 implementation of the higher party size limit for stock violated the National Environmental Policy Act (NEPA) because the agency had not sufficiently analyzed how the change would affect the environment. The disagreement centered on which of the two kinds of NEPA analysis should have been performed: the Park Service had done an environmental assessment; the hikers' group insisted that a more-detailed environmental impact statement (EIS) was required.

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A forecast from the PAC: intermittent gloom with glimmers of hope

Ever-committed to consensus, President Clinton included a provision in his plan for the Northwest forests (Option 9) to set up committees of interested citizens to advise the government on how best to implement the plan. California has three of these province advisory committees (PACs), and each PAC has two official representatives of the environmental community. California Wilderness Coalition conservation associate Ryan Henson serves on one of the PACs, which met for the first time in June. Here is his report.

By Ryan Henson

The Northwest Sacramento province advisory committee (PAC) is quite diverse: it has environmentalists, timber industry representatives, county supervisors, tribal representatives, two teachers, a tour guide, a firefighter, Bureau of Land Management (BLM) and Forest Service officials, and other people from various federal and state agencies. The approaches to Option 9 taken by the PAC members also vary widely, from those who believe it is too weak to those who believe it goes too far. Interestingly, no one has suggested that the plan be scrapped altogether.

The PAC is composed of 29 people charged with helping the Forest Service and BLM implement President Clinton's Northwest Forest Plan. The provinces throughout the Pacific Northwest are defined by watershed bound-

aries. I am a member of the Northwest Sacramento PAC which covers portions of Yolo, Colusa, Glenn, Napa, Marin, Siskiyou, Lake, Tehama, Shasta, Lassen, and Modoc counties. The other two PACs in California are the Klamath (Del Norte and portions of Humboldt, Trinity, Siskiyou, and Modoc counties, as well as parts of southern Oregon), and the California Coast (covering portions of Mendocino, Sonoma, Humboldt, Marin, Napa, Sonoma, Lake, and Trinity counties).

Option 9, designed to protect the northern spotted owl, salmon, and other species dependent on ancient forests and healthy watersheds, is a complex plan calling for restoration of watersheds, protection of old-growth habitat, and ecologically-sustainable economic development. Like many conservationists, I believe the plan is far too weak. But as a PAC member, it is my job to help the Forest Service and BLM follow the plan.

I had mixed feelings about joining the PAC. I worried about the perils of compromise, the danger of being coopted, and even worse, getting a reputation for either. Finally, I called Tim McKay of the Northcoast Environmental Center, who told me, "I think the PAC process needs monitoring." So I sent my application to the Clinton administration, and (after an FBI check on my background) I was appointed to the committee.

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Coalition news

Monthly Report

It certainly is an odd time for the movement. Congress is attempting to trash environmental laws right and left, and we're having to lobby a president who should be on our side. One day we're trying to keep the Endangered Species Act alive; the next keeping old-growth forests intact. Our opponents don't try to repeal the California Desert Protection Act—they simply allocate the National Park Service one dollar to manage the 1.4 million-acre Mojave National Preserve.

At the administrative level, things are mixed. There is more cooperation between environmentalists and land managers than ever before, but horrible decisions are still being made at the highest levels. Many Forest Service and Bureau of Land Management employees are trying to find solutions to controversial issues. They are willing to look at alternatives, invite us on field trips to see the problems firsthand, and craft plans that meet the basic needs of all parties. Then we'll get a ruling like the one overturning the Meiss grazing plan that is contrary to science, good land management, and public opinion.

Most heartening, however, is the outpouring of support from our members. Generous donations and notes of gratitude cheer us on. Offers to volunteer are increasing, so we are dusting off an old idea—Adopt-a-Wilderness—with a new campaign to save our wildlands. More details on this soon...

♦ ♦ ♦

Lucy caught me in a weak moment a few Sundays ago. She dropped by while I was out gardening (this was the weekend with a high of 75°, not last Sunday's 109°) and brought up the subject of a leave of absence.

I was wincing as I pulled weeds, wondering just how long cracked ribs take to heal. Wendy and I had conceded that our planned June backpack was annulled, and I was hoping that I would be better by the July weekend we had set aside.

It occurred to me that I used to hike all the time. Back in the days when I didn't have to schedule trips and vacations months in advance, I took off nearly every weekend. I also didn't have a huge garden, a house to maintain, and frequent family gatherings, realities that can interfere with my romantic notion of frequent trips to the woods.

So when Lucy asked for three months to travel and do things she'd always wanted to do, I said "sure!" We all ought to take sabbaticals, see the world, and recharge our batteries. The only constraint I saw was the plans Wendy and I have to spend three weeks this October in Australia.

There was more than I bargained for. Lucy's three-month window became July, August, and September. After my initial panic at so sudden a change subsided, I realized that this summer was as good a time for her leave as any.

So this issue of the *Wilderness Record* is Lucy's last until the fall. Somehow we'll get issues out in her absence, but the number of typos, editing mistakes, and layout slip-ups undoubtedly will increase. Please be patient with us; we'll try extra hard to maintain her high standards with the *Record*.

My main regret is that I didn't think of taking three months off first.

By Jim Eaton

On bringing back the grizzly

I have just read the Mountain Lion Foundation proposal to bring back grizzly bears to California, as reported in the June 1995 *Wilderness Record*, and regard it as one of the most idiotic things I have ever read. If this is ever seriously proposed, I will almost certainly oppose it.

First, any effects on tourism will almost certainly be negative. Also, the wide open spaces grizzlies seem to need are certainly not compatible with human needs in the USA's most populous state.

Secondly, in regard to wildlife restoration in general, there are some cautions. It will be a mistake to bring back species regarded as dangerous, such as grizzly bears, for three reasons:

1) When most people (myself included) go into a wilderness, they go mainly to be stimulated. Much less do they want to be challenged; in no case do they want to be threatened. I don't even want to be bothered by black bears, although now that I have a food cannister, this probably will never happen.

2) This could be political dynamite. What happens when it becomes known that environmentalists want to introduce known and dangerous predators into heavily used recreation areas? Are these elitist groups trying to drive ordinary folks out of areas they want for their own private playgrounds?

3) The wilderness changes; it would have changed even if humans had never arrived. The balance is ever-changing. We don't know what the balance is now, let alone what it might have been otherwise. So how can we say what it should be?

I accept that today's wilderness is an "ideal" wilderness, without the threats and discomforts of the "old" wilderness, and honestly that suits me just fine. We can protect wilderness just as it is, but I am very hesitant about trying to change it.

Rick Jali

Mammoth Lakes

This proposal is completely impractical and close to being ridiculous. I'm surprised you would publicize such a suggestion. No wonder they call us eco-freaks.

Gordon Nelson
Bishop

Mark Palmer misses the fundamentals of mountain ecosystems. Our wildlife heritage is not a heritage of bears at the top of the food chain; that environment also had Indians living in it, and those Indians hunted the bears, black and grizzly, where the people lived. A bear venturing near a settlement would, I expect, have been a quick target for a number of hunters who were skillful in killing bears. What's missing today is an important part of the original ecosystem, a predator of the bear.

Palmer says that the biological and political objections to re-introduction are formidable; I say that the biggest problem, if the bears are brought back, is creating the proper predator-prey relationship between bears and people. Maybe we should devise a solution to the black bear problem before we create a new and more intractable one.

Bill Schaefer
Pasadena

CWC welcomes a new member

The Ventana Wildlands Group, an organization dedicated to maintaining and restoring the ecological integrity of the Ventana Wilderness, has joined the California Wilderness Coalition. The group has identified the Los Padres National Forest's Ventana Wilderness as a core reserve under the definitions of the continental Wildlands Project and is developing a restoration plan of buffer zones and habitat corridors.

This summer the group is focusing on closing the road to Cone Peak and a second road, open only in the dry season, that separates the eastern portion of the wilderness from the larger western portion. A meeting to discuss the proposed road closures is scheduled for July 13.

For more information about the Ventana Wildlands Group and its efforts on behalf of wilderness, contact Verna Jigour at 3318 Granada Ave., Santa Clara, CA 95051; (408) 246-4425 or Steve Chambers, 212 Woods St., Santa Cruz, CA 95062; (408) 425-1787.

The CWC thanks you

Twice a year, we take the time and space to honor our most generous donors. It is gratifying to have so long and varied a list of individuals, businesses, and organizations this year. We thank all of them for supporting the work of the California Wilderness Coalition.

Richard Van Alstyne; Ascent Technologies; Sidney Barnes; David & Mary Barnette; Peter & Rosalind Bonerz; Warren Jones (Solano Press Books); Florian Boyd; California Alpine Club; Alan Carlton; Elizabeth Carlton; Patrick Carr; Wendy Cohen & Jim Eaton; Edythe & Samuel Cohen; Brian Cox; Richard Crawford; Candace Cross-Drew; Bonnie Dick; Lillian & Claud Eaton; Ellison & Schneider; Richard Ely; Foundation For Deep Ecology; Gaguine Family Foundation; Marilyn Gallaway; William Gustafson; Claire Hemingway; Andrew & Sasha Honig; John Hooper; Luis & LaVerne Ireland;

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Lend a hand to the PCT

After seven years of drought and this year's record snowfall, the Pacific Crest Trail Association is in desperate need of volunteers to help with trail maintenance on the PCT in the Tahoe, Lassen, Plumas, Shasta-Trinity, and Klamath national forests. The work will take place from late July to early August. For more information, call Tom Coleman at (707) 769-0456 between 6 p.m. and 9 p.m.

—Anne Iverson

Wilderness Trivia Question

What is California's one and only national grassland?

Answer on page 7

Understanding fire

How we got into this mess

From the 49ers to the fires of '87

In this fifth installment of our series on understanding fire, John Buckley shows how more than 100 years of fire suppression and logging in the Sierra Nevada created the dilemma that confronts us today: too much fuel, too few options.

By John Buckley

Few if any efforts to put out forest fires were made by the first waves of miners, homesteaders, and cattlemen to come to the Sierra Nevada, for the forests appeared to be an endless resource blanketing the mountains. Instead, early settlers used fire to open up the forest so grizzly bears, mountain lions, and other lurking predators could be seen at a distance. Trees were so abundant that only the best wood was considered of much value; other trees were ignored or burned to clear the forest and provide more forage for livestock.

Many non-native plants were introduced into the high country at this time by livestock. Some of the annual grasses in particular spread rapidly, taking advantage of soil disturbance from hooves and frequent fires. The increased openness of the upper forests may have diminished populations of wildlife species that depend on forest cover, especially the fur-bearing carnivores sought by trappers and hunters.

Across the foothills, ranchers used fire to clear oak woodlands, get rid of brush, and convert stands of gray pine to grassland. Though small fires around homesteads, mines, towns, or ranches would have been fought and suppressed, the vast majority of wildfires in the seemingly endless forests were left to burn out; such fires often lasted until the snows came.

As early as the Gold Rush era, logging provided jobs, profits, and valuable wood products. Soon the value of timber—pine in particular—saw logging spreading beyond the immediate vicinity of mining communities.

A 1993 workshop on the California spotted owl documented the rapid increase in logging. "At the beginning of the Gold Rush, in 1849, approximately five million board feet of all species of timber was harvested in California. By 1869, 169 million board feet of just ponderosa pine was harvested, largely from the Sierra Nevada pine belt. The volume of fuelwood that was cut is unknown, but was certainly considerable and may have rivaled wood cut for lumber in volume."

Where logging took place, no slash treatment was attempted, for the vastness of the forest and the limits of transportation, equipment, and tools made logging a tedious, time-consuming enterprise. When trees were cut, only clear sections of wood were taken. The tops, branches, and a great amount of stem material that would be highly valuable today were left behind. This unnatural accumulation of dead, dry fuels allowed fires in logged lands to burn far more intensely than fires prior to logging.

"As the lower elevation pine forest became depleted and the transportation network increased, logging in the mixed conifer forest increased. By the turn of the century, Leiberg estimated that over 40 percent (i.e. 1,022,890 acres) of the forest of the northern Sierra Nevada had been entered for harvest. Approximately 30 percent of the standing timber was in areas practically inaccessible for harvesting at that time.

"Logging operations also often caused fires, primarily through sparks from wood-fueled logging equipment, especially wood-fueled steam-powered donkey engines, and from clearing logging debris from roads or travel routes" (from the Cal Owl EST Workshop Proceedings).

As fires began to burn in areas of high timber value, some efforts to suppress fires began, especially close to

communities. But not until the 1920s and 1930s did fire suppression begin to effectively control fires across the vastness of the national forests. Even then, the limited reach of roads and fire suppression techniques meant fire fighting succeeded only in stopping fires of moderate intensity.

Fire lookouts began to monitor the forests and alert fire crews at the first sign of smoke. Workers with picks, shovels, and other rudimentary equipment could fight the edge of creeping fires, but in areas where heavy logging slash and hot weather combined to make hotter fires, suppression techniques were not yet sufficient to work effectively.

"At the onset of the fire suppression era, most fires were easily suppressed, the result of the frequent burning of the previous period. However, conditions for, and the risk of, severe stand-replacing fires increased under the fire suppression policy, though the actual number of stand-replacing fires remained low. The combination of logging slash build-up and the understory tree growth created fuel ladders between the ground and overstory trees, a stand structure conducive to severe stand-replacing fires. As a result, the first large-scale, widespread crown fires began to appear" (Cal Owl EST Workshop Proceedings).

The more lightning fires were suppressed, the more fuels began to build up in the forest. Pine needles, branches, limbs, and snags fell to the ground, often building up over decades. Thickets of young trees, predominantly shade-tolerant white fir and incense cedar, began to fill in between the pines in the lower-elevation forest and between the larger trees in the mixed-conifer forest.

Shaded out, hardwoods began slowly dying and adding their dense, dead wood to stands ripe for burning. Improved road access brought more people into the woods. Unseasonal fires frequently started from carelessness on the part of campers, smokers, welders, and loggers.

Most of the accidental fires were suppressed, but when conditions were right, large fires ripped across the developing layers of fuel. After stand-replacing fires, many areas were densely replanted with conifers. Other burned areas were left to regenerate brush, grasses, and hardwoods. In either case, the heavy regeneration of new growth created consistent fuelbeds ready to burn again a decade or two later.

In the late 1960s and early 1970s, with the demand for wood surging, logging boomed on both private and federal lands. As the value of mixed-conifer species rose, the Forest Service began to sell large quantities of white fir, cedar, Douglas fir, red fir, and Jeffrey pines.

Clearcuts—blocks within which all commercially valuable trees were cut and removed—became the standard. Residual live trees were cut, bulldozed into piles and burned, or burned by broadcast methods.



The twentieth century brought fire suppression and plantations to the Sierra Nevada, an incendiary combination. Photo by Ryan Henson

A good deal of the post-clearcut burning was very low-intensity, cool-weather burns that left behind high levels of 100-hour and 1,000-hour fuels, the longest-burning fuels. When pine plantations were planted in the midst of these heavy fuel loads, a continuous layer of aerial fuels was available to burn once the plantation trees reached 8-10 feet tall.

At clearcuts where heavy grading and hot burning had denuded the site prior to replanting, fuel loading was low for many years. But the rows of neatly planted trees, all the same size and height, quickly produced the same continuity of fuels. Even when thinning kept the crowns of the young pines from touching adjacent trees, any kind of wind quickly sent flames crowning through the continuous canopy of fuel created by the even-aged plantations.

One of the main faults of fuel reduction efforts during the heyday of clearcutting was the lack of fuel reduction outside the cutting units. If a 1,000-acre mountainside of fairly thick mixed-conifer forest was fragmented by five clearcuts of 20 acres each, the remaining 900 acres continued to grow untouched by either fire or thinning operations. Even in clearcut units, many areas went without treatment for years. In some national forests, tight budgets, unsuitable weather, and other constraints created a

backlog of thousands of acres of clearcuts needing fuel reduction treatment.

In many other clearcuts, the prescribed method of fuels reduction was "lop and scatter"—huge piles of tree tops, limbs, dead trees, and logs were chainsawed into

pieces, spread across the site at an average depth of 36 inches or less, and left in place. New trees were planted in the "holes" amid the slash.

We can easily imagine how hotly such evenly spread, heavy accumulations of dead fuels burned when ignited. At upper elevations, the weight of the snowpack eventually tamped down the fuels, compressing them close to the ground. But in the warmer, lower elevations where snowpacks were minimal, "lop and scatter" fuels stayed suspended for years, just waiting to explode into flames.

The Groveland District of the Stanislaus National Forest was typical of districts with a fuel build-up prior to the 1987 fires that consumed the majority of the district's

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The more lightning fires were suppressed, the more fuels began to build up in the forest.

Topsoil fried, entire mountains were blackened, and wildlife species unable to flee were wiped out.

Of fish and roadless areas

Lassen plan fails salmon and roadless areas

By Steve Evans

The Forest Service and Bureau of Land Management (BLM) are soliciting public comments on a long-term management strategy they are developing for the watersheds of the Lassen National Forest that support imperiled salmon and steelhead.

The agencies already have adopted an interim management strategy known as PacFish (see May 1995 *WR*) for the public lands of the Deer Creek, Mill Creek, and Antelope Creek watersheds in eastern Tehama County. That strategy is under appeal by conservation groups because it fails to adequately protect the declining spring run chinook salmon and winter steelhead in these key tributaries of the Sacramento River. Once numbering in the thousands, the spring run chinook salmon and winter steelhead populations have declined to just a few hundred fish.

Any effective management strategy for these "at risk" fish stocks would protect the remaining roadless areas that are habitat reserves for the fish and sources of high-quality water. Unfortunately, the PacFish strategy fails to protect roadless areas, and the current Lassen forest plan calls for road building and intensive logging in several key areas.

Along with the usual roads and clearcuts, the Forest Service has allocated much of the Butt Mountain Roadless Area—the source of Deer Creek—for eventual development of a downhill ski area. The agency also is proposing to build roads and salvage log more than 200 acres of the Polk Springs Roadless Area along Deer Creek. Approximately 400 acres of the Mill Creek Roadless Area would be lost to road building and logging under both the forest plan and the interim PacFish guidelines.

The threats to anadromous fish are not limited to road building and logging. A recent Forest Service decision to spray three kinds of herbicides on nearly 800 acres of tree plantations in the watersheds had to be revised when an appeal by Friends of the River pointed out that the two most toxic and persistent herbicides could harm fish (the agency has since decided not to use these two herbicides).

In a fishy development, cattle return to Echo-Carson

By Jim Eaton

In an Alice in Wonderland approach to land management, Deputy Regional Forester James Lawrence has overturned the decision to bar cattle from the proposed Echo-Carson Wilderness. The grazing ban, intended to protect the threatened Lahontan cutthroat trout and other species, would have gone into effect this year. Instead, the Meiss allotment will be opened to cattle in August if the meadows are dry enough by then to permit grazing.

The supervisor of the Lake Tahoe Basin Management Unit (LTBMU) decided in 1993 that the Meiss allotment needed to be closed to restore its fisheries and vegetation after decades of grazing (see August 1993 *WR*). The situation was particularly acute at Meiss Meadow, where cattle trampling the streambanks and browsing on willows had so degraded trout habitat that the U. S. Fish and Wildlife Service estimated the area would need 10–15 years to recover even with all the cattle removed.

The supervisor's decision to bar cattle to allow the lands to recover was supported by California's Attorney General and Department of Fish and Game (DFG). In the face of strong evidence to the contrary, Lawrence ruled there were "insufficient data" to justify the preservation of threatened, endangered, and sensitive wildlife and plant species. Apparently the burden of proof is on the endangered species, not the cows.

The government's goal is to have 3,000 Lahontan cutthroat trout by the year 2000, but because a biological evaluation does not indicate whether "population growth

Ironically, the chief of the Forest Service, Jack Ward Thomas, and a scientific team that assessed forest management (FEMAT) developed a stronger strategy for protecting endangered fish as part of the president's Northwest Forest Plan (Option 9). Thomas' aquatic conservation strategy establishes wide riparian reserves along stream courses, designates key watersheds (which include roadless areas) as refuges for imperiled stocks, uses watershed analyses to guide future management, and introduces a watershed restoration program that reduces the road system. Thomas' admonition that all four components of his strategy are interdependent and "will not achieve the desired results if implemented alone or in some limited combination" was ignored in the PacFish plan, which establishes riparian reserves and key watersheds but does not specifically protect roadless areas.

In soliciting scoping comments before developing a long-term plan for the Lassen watersheds, the agencies are offering environmentalists an opportunity to push for full implementation of the aquatic conservation strategy developed by Thomas and the team of scientists, with an emphasis on protecting roadless areas and reducing the road system in key watersheds.

What you can do

Write a letter to Leonard Atencio, Lassen National Forest Supervisor, U. S. Forest Service, 55 South Sacramento St., Susanville, CA 96130. Your letter must be postmarked by August 11.

- Urge him to adopt the full aquatic conservation strategy developed by Jack Ward Thomas and FEMAT in the long-term plan for imperiled salmon and steelhead stocks in the Deer Creek, Mill Creek, and Antelope Creek watersheds.

- Also urge him also to prohibit logging and road building in the seven roadless areas—Butt Mountain, Cub Creek, Polk Springs, Ishi, Mill Creek, Wild Cattle Mountain, and Heart Lake—in these watersheds until they can be designated wilderness.

[is] on track or lagging," Lawrence concludes "it appears to me that the [trout] are thriving." He admits that "in 1991 and 1992, no fish were discovered in Creek 4; however, in 1993 there were two juvenile fish inventoried, one in each of two habitat units." Apparently this spectacular increase in population, from zero to two, supports his conclusion.

Though almost all the streams in Meiss Meadow and Big Meadow are rated fair or poor, by lumping them in with other streams in the allotment, Lawrence determined that only 22 percent of stream mileage is marginal. This still exceeds agency standards, but future mitigation is expected to lower the mileage of damaged streams to an acceptable 17 percent. Astonishingly, Lawrence questions whether there is "a connection between grazing use and the fair/poor condition of stream bank stability."

As for DFG concerns about how grazing harms fawning habitat, Lawrence replies that "grazing may even benefit deer habitat by creating more willow shoots as a result of browsing."

After the Desolation Wilderness, Echo-Carson is the most popular backcountry area in the LTBMU, with between 10,000 and 15,000 people visiting the area each year. The Forest Service receives frequent complaints from recreationists about cows eroding streambanks, trampling meadows, destroying trails, and clanging their bells.

The LTBMU supervisor has been ordered to reconsider his decision to remove cows from the allotment. In the meantime, cattle will be allowed to graze there, subject to the concurrence of the Fish and Wildlife Service.



The deep pools of Mill Creek are prime habitat for salmon and steelhead. Photo by Jim Eaton

- A watershed analysis should identify sources of sedimentation—particularly roads—and ways of eliminating them.

- In addition, the agency should identify and modify other actions (like herbicide application) that can harm anadromous fish.

Send a copy of your letter to Chuck Schultz, BLM Redding Area Manager, 355 Hemsted Dr., Redding, CA 96002, because the BLM manages scattered parcels in the lower drainages of Deer, Mill, and Antelope creeks.

Pine Creek acquisition links two Modoc roadless areas

A land acquisition intended to protect habitat for the native redband trout in northeastern California has the added benefit of linking two Modoc National Forest roadless areas. In February the Wildlife Conservation Board approved the state's acquisition of 2,000 acres along Pine Creek in Modoc County. The Trust for Public Land deserves special thanks for acting as a catalyst in the acquisition.

Flowing into Goose Lake on the Oregon border, Pine Creek cuts through the volcanic Modoc Plateau and links Mt. Bidwell Roadless Area to Crane Mountain Roadless Area to the north. The purchase establishes a preserve where long-term restoration measures for the trout, a species of special concern, can be launched. The redband trout, a brightly colored and isolated relative of the rainbow trout, has suffered alarming population declines.

Adapted from an article in the May 1995 issue of *Streamkeepers Log*, a publication of *California Trout*. *Cal Trout* is working to reverse declines in redband trout populations.

Ancient forests

The view from the PAC

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Option 9 includes an economic plan to ease the transition between the cut-and-run logging of the past and a more sustainable future. The PACs are charged with selecting "jobs-in-the-woods" projects for unemployed timber workers and other people affected by unsustainable logging practices. These programs can include watershed restoration projects, tree planting, road closures, and other ecosystem rehabilitation efforts. Since 1994, over \$4 million has been spent on restoration projects involving 2,200 people.

I expected our first PAC meeting to be a disaster, and indeed it appeared to be a failure when Governor Wilson's Assistant Secretary for Rural and Economic Development announced that the PACs should be dissolved as quickly as possible so bioregional groups (state-chartered groups of loggers, ranchers, government officials and, occasionally, environmentalists who meet to discuss conservation issues) could take their place. Since many bioregional groups are notoriously right-wing, it appeared the Wilson administration feared the influence the more fairly-balanced PACs would have on forest management.

Luckily, most everyone ignored such suggestions. In fact, within the first few minutes of our meeting, we began calmly and rationally discussing how we could provide job opportunities within our province while protecting ecosystems and adhering to Option 9's rules. Over the course of the day, we achieved a consensus on several key principles:

- maintaining and restoring biological diversity;
- preserving and rehabilitating healthy watersheds;
- providing economic opportunities for rural people through watershed restoration and other necessary efforts;
- diversifying rural economies;
- bringing fire back into forest ecosystems; and
- reducing the danger of unnaturally hot fires by disposing of logging debris, thinning small trees, and setting controlled burns.

The specific steps we will take to achieve these overarching goals will have to be identified in future meetings, but I was heartened that so diverse a group could reach consensus on even the most general issues. In today's rancorous and polarized political climate, I found a glimmer of hope in the willingness of regular people to find mutually agreeable solutions.

But with Congress seemingly intent on eradicating environmental protections, our progress may be too good to last. Congress could destroy the PACs by withdrawing all funding from Option 9, overturning Option 9, or exempting all national forest logging from federal law. All

of these options are being debated in the Capitol, and there is no guarantee that President Clinton will use the veto to protect his own administration's forest plan.

That no members of Congress or their staff attended our first PAC meeting shows an unwillingness to seek long-term solutions for our forests and rural communities. Indeed, representatives Wally Herger, John Doolittle, and Vic Fazio (who each represent portions of the Northwest Sacramento province) recently wrote a letter to the Forest Service decrying protection for our ancient forests. Implicit in this letter was a call to return to the unsustainable logging that characterized the 1980s.

Because of these threats from Congress, I'm not optimistic about the future of our PAC. On the other hand, if enough ordinary people can get together and discuss these issues thoughtfully, perhaps we can thwart the attempts of politicians and their big-timber backers to sow divisiveness and block grassroots solutions. Our forests and our communities will be better for it.



Dark Canyon, Thomes Creek Roadless Area. This old-growth reserve in the Mendocino National Forest is one of the responsibilities of the Northwest Sacramento province advisory committee. Photo by Ryan Henson

The next Northwest Sacramento PAC meeting is scheduled for August 2-3. PAC meetings are open to the public. Call Dave Howell at the Ukiah office of the BLM at (707) 468-4000 for details. For information about the California Coast PAC, call Daniel Chisholm of the Mendocino National Forest (NF) at (916) 934-3316. For the Klamath PAC, call Barbara Holder of the Klamath NF at (916) 842-6131.

New NFMA regs spell doom for forest wildlife

By Ryan Henson

In April, the Forest Service revealed a plan to change the way the National Forest Management Act (NFMA) is implemented. Under current NFMA rules, the Forest Service must prepare management plans for its national forests every 10-15 years. These forest plans identify areas suitable for logging, grazing, wildlife protection, and other activities and detail how each part of the forest will be zoned and managed. In zoning areas for different uses, forest plans are similar to the general plans prepared by city and county governments. Under current NFMA rules, conservationists have saved countless old-growth groves, roadless areas, and other important lands from logging, road construction, and development by having them zoned for protection.

The reforms proposed by the Forest Service are intended to give the agency more latitude in implementing the NFMA. Unfortunately, the agency's reforms appear designed to weaken protection for forest ecosystems. For example, the Forest Service would declare all forested lands not specifically protected by Congress open to logging unless soil instability or other considerations make them too fragile to log.

The proposed revision also would grant forest supervisors the authority to determine the maximum size of clearcuts for their national forests and allow logging and road construction along streams, where they currently are prohibited. In addition, the new rules remove a requirement that the agency first determine which areas are suitable for grazing before allowing grazing to occur.

The most important NFMA regulation reform proposed by the Forest Service involves eliminating the "viability requirement" which mandates that the agency

provide enough habitat in each national forest to sustain all native vertebrates (neither the current rules nor the proposed rules protect native invertebrate species or plants). The viability requirement was at the heart of the northern spotted owl lawsuits that resulted in extensive improvements in how the public forests of the Pacific Northwest are managed.

Under the proposed rules, the Forest Service would require only that sensitive species—species recognized as threatened by a state or federal agency—be protected, even though this limitation might allow once-common species to slip toward extinction before they can be identified as sensitive. Sadly, this proposal ignores the trend toward protecting species before they are endangered.

What you can do

The Forest Service is accepting public comment on the proposed changes to the NFMA regulations until July 12, 1995 (letters must be postmarked by that date). Send your comments to the Director, Ecosystem Management (1920; 3 CEN), USDA Forest Service, P.O. Box 96090, Washington, DC 20090-6090.

Request that the Forest Service:

- retain its current limit on clearcut size;
- retain the viability requirement and extend it to apply not only to all native vertebrate species but other forms of life;
- determine grazing and logging suitability during the land management planning process for each national forest; and
- continue to protect streams, soil, fisheries, and other important components of the forest ecosystem.

Mike Anderson, Linda Blum, and the Association of Forest Service Employees for Environmental Ethics contributed to this article.

Fire history of the Sierra Nevada

continued from page 3

forest. Most timber sale purchasers had been required to fully treat fuels within 50 feet of roads, but only to lop and scatter fuels farther back from public view. Fuels from 30-year-old timber sales were still scattered among the forest stands, surrounding the fresher slash in recent clearcuts and plantations. When firestorms raged, the combination of old and new slash, even-aged plantations, thickets of cedar and fir, and intense fire weather all combined to create total consumption across nearly 60,000 acres.

The 1987 fires burned so hot that topsoil fried, entire mountains were blackened without one tree surviving, riparian zones burned to a crisp, and wildlife species unable to flee were wiped out.

Next month: Where do we go from here?

A former Forest Service fire fighter, John Buckley now directs the Central Sierra Environmental Resource Center and keeps a weather eye on the Stanislaus National Forest.

Wilderness news

Stock declines in Sequoia-Kings Canyon NP

continued from page 1

On June 14, a federal judge agreed with the hikers, ruling that the Park Service had violated NEPA and ordering the agency to reinstate the former limit of 20 animals. The judgment also requires that the Park Service replace its "badly flawed" environmental analysis with an EIS if the agency decides to pursue an increase in the allowed number of stock. Since the change in party size limits for people was not challenged, that decrease remains in effect.

The coordinator of the High Sierra Hikers Association, Peter Browning, says "We were very pleased, of course, at the outcome. As we contended all along, the Park Service did violate NEPA regulations."

Charles Morgan, a representative of the Backcountry Horsemen of California which supported the uniform size limit, believes that the judge's rejection of the Park Service's adoption of the standard is to the detriment of wilderness because it "destroys any semblance of further cooperation of the interagency group working to manage the Sierra in a unified way." Morgan says his organization believes that 25 stock is a reasonable figure, noting that "only 2 percent of groups bring in more than 20 head."

The issue of party size limits, and stock limits in particular, has long been a contentious one. The Park Service's limit of 20 animals for Sequoia-Kings National Park dates from 1966, when it was imposed in an attempt to minimize the environmental damage stock were causing. By 1971, the agency had decided it should begin phasing out stock use in the higher elevations of the park, but that decision was not implemented. A 1983 environmental assessment of meadow management in the park acknowledged "subtle and insidious influences to meadow ecosystems that have resulted from long-term stock use" but deemed backcountry travel with pack and saddle stock appropriate nonetheless. Much of the backcountry became wilderness the following year, but that designation does not preclude the use of stock.

Like the related controversy over cattle grazing in wilderness, the controversy of stock use is how their presence and numbers impact wilderness recreation and the wilderness itself (see companion article). Browning's description of encountering stock in the high country—"People hike into high-altitude national park wilderness expecting to find pristine country, only to suffer a 'barnyard experience': trails, campsites, and drinking water polluted by stock manure and urine"—brings to mind the disgust many recreationists feel on encountering cattle in wilderness areas:



BLM to close roads in Jacumba Wilderness

The Bureau of Land Management (BLM) plans to reclaim two dirt roads that are attracting illegal vehicle traffic in the Jacumba Wilderness on the California-Mexico border, one of the new desert wilderness areas established by last year's California Desert Protection Act. Work is scheduled to begin in August after an environmental assessment of the project is prepared.

The two routes, labeled Coyote 1 and 2, penetrate the wilderness from its eastern boundary. The first route extends for one and a half miles into the foothills of the Jacumba Mountains. The other road rises for a quarter mile along a ridge in the mountains.

The proposed restoration work will include recontouring the roadbed, planting ocotillo and other native vegetation, and applying desert varnish so reclaimed areas blend into the surrounding terrain.

For more information or to receive a copy of the environmental assessment, contact the BLM's El Centro Area Manager, G. Ben Koski, at 1661 South Fourth Street, El Centro, CA 92243; (619) 337-4400.

In the early 1990s, when the Central and Southern Sierra Interagency Wilderness Managers Group recommended adopting a uniform maximum party size of 15 people and 25 stock and asked for public comment on the plan, 76 percent of respondents believed the stock limit should be set at 20 or lower, citing trail and campsite damage, degradation of meadows, and the aesthetic impacts of manure and noise from stock parties. Nonetheless, the interagency group adopted its recommended limit because, it said, "25 head of stock is the minimum needed to service an equestrian party of 15."

Even more respondents to the Park Service's 1993 environmental assessment of raising the stock limit at Sequoia-Kings Canyon opposed the increase—93 percent. The National Parks and Conservation Association, Sierra Club, Wilderness Society, and Wilderness Watch joined the High Sierra Hikers Association in opposing the agency's plan. Two groups of stock users, the Backcountry Horsemen and High Sierra Packers Association, supported the change.

The Backcountry Horsemen of California contend that pack and saddle stock are not inconsistent with wilderness protection. Increasingly, wilderness managers and groups like the Backcountry Horsemen are advocating lower-impact stock use. In some wilderness areas, stock users are required to carry in food pellets for their animals, which mitigates both the importation of weeds and the problems associated with grazing, and in most wilderness areas there are restrictions on how close to water sources stock parties may camp.

How many stock is too many? How many answers do you want?

By Tom Suk

With all the controversy over the size of stock groups in wilderness (see article on page 1), a brief review of the literature on this subject may help to clear the air.

That large groups may have severe adverse impacts on people's wilderness experience (which researchers refer to as the social wilderness character) was first documented in the 1960s in a report prepared by the Wildland Research Center. Detailed follow-up studies were conducted in the 1970s by George Stankey, a professor of forest resources at Oregon State University. Stankey found that two-thirds of wilderness visitors reported being adversely affected by encounters with groups of a dozen or more people.

Stankey defined party size as the number of persons plus the number of stock animals. Under this definition, the 1994 decision by the National Park Service to decrease the allowed number of people per group (from 25 to 15) in Sequoia-Kings Canyon National Park while increasing the number of stock per group (from 20 to 25) results in a maximum group size of 40. Stankey concluded in 1973 that groups of 30 or more had "an extraordinarily detrimental effect" on visitors who encounter them.

A 1990 wilderness management textbook, co-authored by Stankey and endorsed by all four federal agencies that manage wilderness, concludes: "A large party detracts much more from visitor satisfaction than a small party. Although a limit on party size is currently the most common pack stock management technique in wilderness—almost one-half of all areas have a limit—the number allowed ranges from five to 50 animals per party, with 20 the most common limit. Such high limits will have very little beneficial effect; both social and campsite impacts are unlikely to be reduced unless limits are 10 animals or less."

A recent study in the Sierra Nevada further documents the effects of large stock groups on the social wilderness character. Alan E. Watson of the University of Montana queried visitors to Sierra wildernesses about the size of stock parties that would adversely impact their wilderness

experience. The average hiker recommended a limit of six animals per group; the average stock user recommended an upper limit of 13.

By contrast, some commercial packers opposed the 25-stock limit as too low and uneconomical. Like other agencies that manage wilderness, the Park Service can—and does—issue special use permits at its discretion for groups that do not meet existing standards. Managing agencies tend to be shy about curtailing commercial use of wilderness because the communities near wilderness areas—where many of the agencies' employees live—typically have a small tax base and oppose restrictions on local concessioners.

In finding for the hikers' group, Judge Claudia Wilken wrote that "the evidence demonstrates that [Sequoia-Kings Canyon] management's discretion may be too heavily impacted by political factors to have a predictable ability to protect the environment," citing a National Park Service document that admits that the season when stock are allowed to graze in the park's meadows is "a conscious compromise between resource protection and political expediency."

Judge Wilken's decision does not affect the other Sierra wilderness areas—Ansel Adams, Carson-Iceberg, Dinkey Lakes, Dome Land, Emigrant, Golden Trout, Hoover, Jennie Lakes, John Muir, Kaiser, Mokelumne, Monarch, South Sierra, and Yosemite—where uniform party size standards were adopted. Only one other wilderness, Emigrant, had its limits on stock increased as a result of the interagency recommendation on uniform party size limits. The High Sierra Hikers Association was unable to forestall that increase, which was formalized in the Stanislaus forest plan of 1991.

Several scientists have documented that large stock groups can also have detrimental effects on the ecology of wilderness areas. David N. Cole of the Forest Service's wilderness management research unit determined that "the effectiveness of reduced party sizes in reducing resource damage is greatest where impact is likely to occur quickly (for example, in fragile areas, in little-used and relatively undisturbed areas, and where parties travel with stock). Limits on party size must be quite low (certainly no larger than 10) to be worthwhile." Cole also found that "trampling impacts of pack stock are particularly severe because considerable weight is carried on a small bearing surface. Therefore, vegetation and soil damage occur rapidly where stock leave the trail." He concluded that "the size of parties influences the severity of a number of problems. Particularly in little-used and off-trail places, it is critical that stock party size is minimized."

Two studies on the Sierra Nevada bighorn sheep provided strong cautions about large pack stock groups within the bighorn's range. One researcher noted "significant damage to alpine meadows" from the passage of large stock groups and found that encounters with large stock groups cause bighorn sheep to retreat rapidly from and avoid key feeding sites.

The group size limits for stock animals suggested by hikers (six), researchers (10), and stock users (13) contrast sharply with the limits currently in place for Sierra Nevada wildernesses: 20–25 animals per group. The managing agencies have never provided an articulate rationale for the current high numbers, but one thing is clear. The current limits are not based on either science or public preference. That leaves one obvious explanation—politics.

Tom Suk is a member of the High Sierra Hikers Association (HSHA). For a copy of the references he provided with this article, contact the HSHA at Box 8920, South Lake Tahoe, CA 96158 or the California Wilderness Coalition.

Book reviews

Witty yarns of a rugged individualist

The Ballad of Nonose Valley

By J. P. Bernhard, Carter Press, Oakland, 1995, 146 pp., \$8.95.

The Ballad of Nonose Valley is not your typical collection of nature stories. J. P. Bernhard's tales about the people and animals sharing the foothills of the Sierra above Fresno dwell on the individuals, not the wilds.

Opponents of hunting may not enjoy this book. "My respect, gratitude, and affection for these creatures doesn't, of course, prevent me from shooting them at other times in other places," the author writes. Bernhard and his neighbors kill a lot of critters for food, and near his homestead he is not kind to predators, especially rattlesnakes. But you do get a peek into the minds of people who still live partially off the land as their ancestors did for hundreds of years.

That is what this book is all about. In fanciful and witty yarns, *Nonose Valley* chronicles the routines of rugged individualists who still inhabit our dwindling rural lands. Although he kills wild animals to fill his belly, Bernhard understands his place in the scheme of life. And unlike Captain Ahab in his pursuit of Moby Dick, Bernhard usually fails in his quest to shoot the largest buck or gig the biggest bullfrog.

Bernhard's environmental leanings show in the story "How many bulldozers is a raccoon worth?" in which he learns that PG&E wants to build a road through his country to construct yet another power plant. The engineers ask for his help. "I think I never saw a roadless area I didn't like," I say and turn and walk away." You can guess what happens to the first bulldozer he crosses.

It does bother me that the residents of Nonose Valley do not abide by the rules. They live as the Russell brothers

put it in *On the Loose*: "Unfastidious outdoorsmanship is the best kind." Spread throughout the book are descriptions of opportunistic hunting, stunning fish with crushed buckeye, and burning out rattlesnakes.

But this book is fiction, isn't it?

—Jim Eaton

Another view of Nonose Valley

I've been waiting a long time to read this book, though I didn't know it. Unlike the bloodless, plotless modern concoctions, these are stories the way Twain and O. Henry and de Maupassant wrote stories, but with a decidedly up-to-date sensibility. In J. P. Bernhard's stories, something always happens—something wry, something sad, something brutal, something surprising, and many things funny.

Bernhard's fictional community on the west slope of the Sierra Nevada is peopled with independent characters who live free, die free, and pass the time in between frogging, hunting, and protecting their land and their friends. Nonose Valley is also peopled with some of the most memorable animals I've ever met: Nick the cat, a wily five-point buck, and best of all, the cottontail that dug Charlie Parker (a story that should be widely anthologized). The geography of California is richer for the introduction of Nonose Valley.

Bernhard's extensive use of vernacular infuses his stories with color and authenticity, but it may confound city folks occasionally (it did me). As if the gray pine didn't have enough names already, Bernhard calls it bull pine.

I'll be passing this book along to a lot of my friends. After all my years of reading novels, the *Ballad of Nonose Valley* has me wanting to read short stories again.

—Lucy Rosenau

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Not pictured but still available: our animal design by Bay Area cartoonist Phil Frank (beige or light gray) for \$12. All shirts are 100 percent double-knit cotton. To order, use the form on the back page.



Calendar

July 10 COMMENTS DUE on the CalOwl EIS, the Forest Service's plan to manage spotted owl habitat in the Sierra Nevada (article in April 1995 WR). Send to: Janice Gauthier, EIS Team Leader, 2999 Fulton Ave., Sacramento, CA 95821.

July 12 COMMENTS DUE on the Forest Service's proposed changes to its National Forest Management Act regulations (article on page 5). Send to: Director, Ecosystem Management (1920; 3 CEN), USDA Forest Service, P. O. Box 96090, Washington, DC 20090-6090.

July 13 MEETING to discuss road closures in the Ventana Wilderness (article on page 2). For more information, call Verna Jigour at (408) 246-4425.

July 21–23 ANNUAL MEETING of the Sierra Nevada Alliance at June Lake. The conference will address sustainable Sierra communities. For more information, call the Alliance office at (916) 542-4546.

August 2–3 MEETING of the Northwest Sacramento province advisory committee (article on page 1). For details, call Dave Howell at the Bureau of Land Management's Ukiah office, (707) 468-4000.

August 11 COMMENTS DUE on a Lassen National Forest plan to protect anadromous fish in Deer, Mill, and Antelope creeks (article on page 4). Send to: Leonard Atencio, Forest Supervisor, Lassen NF, 55 South Sacramento St., Susanville, CA 96130.

Wilderness Trivia Answer

Butte Valley National Grassland in the eastern Klamath National Forest, designated in 1991.

from page 2



**California
Wilderness
Coalition**

Purposes of the California Wilderness Coalition

...to promote throughout the State of California the preservation of wild lands as legally designated wilderness areas by carrying on an educational program concerning the value of wilderness and how it may best be used and preserved in the public interest, by making and encouraging scientific studies concerning wilderness, and by enlisting public interest and cooperation in protecting existing or potential wilderness areas.

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—Walt Whitman

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