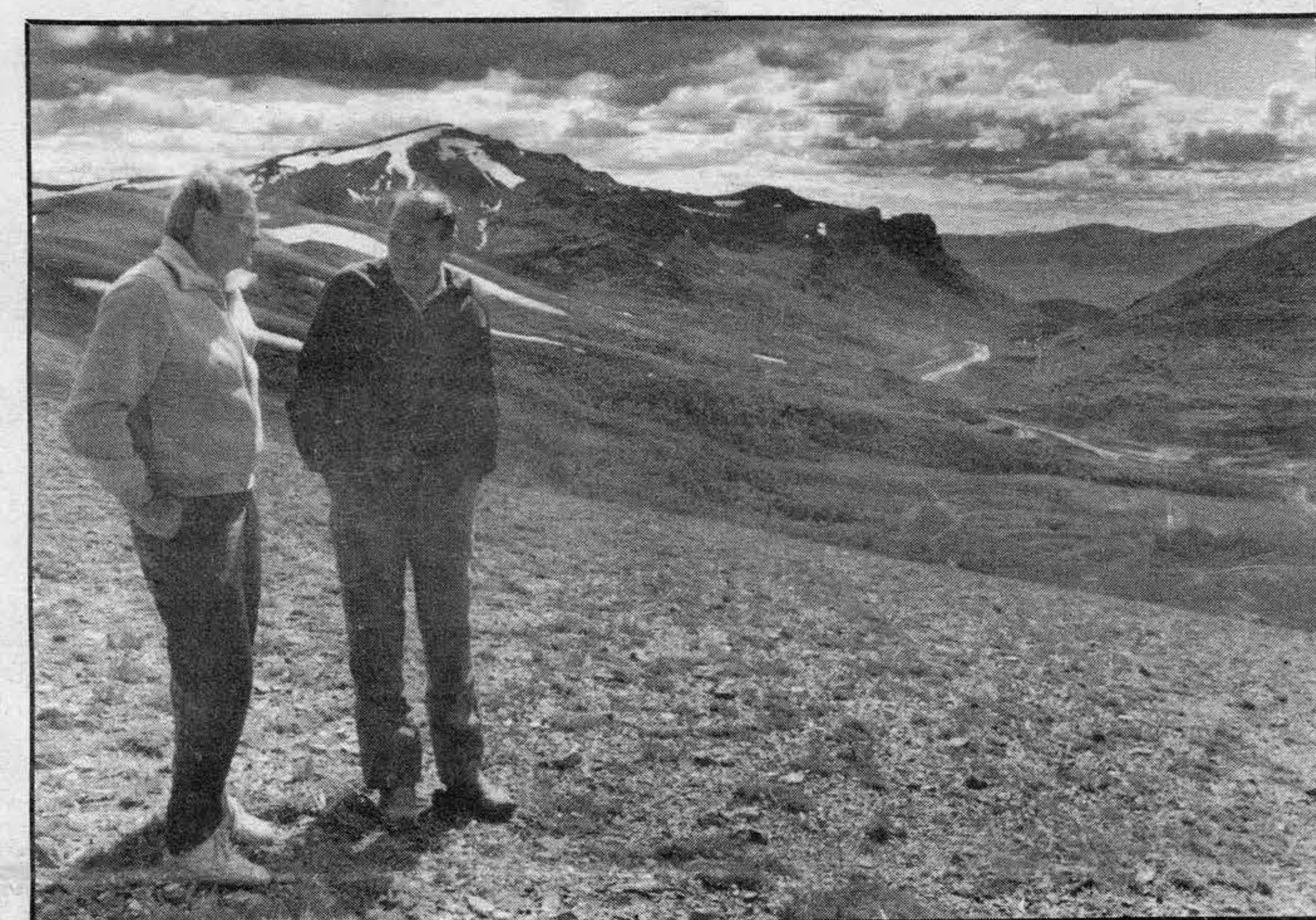
High Country News

October 4, 1993 Vol. 25 No. 18 A Paper for People who Care about the West One dollar and fifty cents

MINING REFORM



Jon Christensen

Glenn Miller, left, and John Livermore talk on a ridge above a gold mine in Nevada's Independence Mountains

Searching for common ground

John Livermore is no run-of-the-mill gold miner.

And Glenn Miller is no garden-variety environmentalist.

Like leaders of the Israelis and PLO, they've reached out in an attempt to find common ground in the fight over mining reform.

This summer, Livermore and Miller traveled with Great Basin regional editor Jon Christensen to some of the giant open pits of northern Nevada, where 65 percent of the nation's gold is mined. They agreed that reform of the 1872 Mining Law is both necessary and inevitable, and, negotiating as individuals, they arrived at a compromise. Each is well aware that their agreement breaks ranks with positions staked out by their colleagues. But they expected attacks from friends when they decided to talk to the enemy.

As they traveled and talked, the Senate passed a bill sponsored by Idaho Sen. Larry Craig, R, that reflects the mining industry's minimal concessions to reform. A tougher bill urged by environmentalists and sponsored in the House of Representatives by Reps. Nick Rahall, D-W.Va., and George Miller, D-Calif., continues under intense debate and lobbying. Our story begins on page 8.

HIGH COUNTRY NEWS

(ISSN/0191/5657) is published biweekly, except for one issue during July and one issue during January, by the High Country Foundation, 119 Grand Avenue, Paonia, CO 81428. Second-class postage paid at Paonia, Colorado.

POSTMASTER: Send address changes to HIGH COUNTRY NEWS, Box 1090, Paonia, CO 81428.

Subscriptions are $28 per year for individuals and public libraries, $38 per year for institutions. Single copies $1.50 plus postage and handling. Special Issues $3 each.

Articles appearing in *High Country News* are indexed in *Environmental Periodicals Bibliography,* Environmental Studies Institute, 800 Garden St., Suite D, Santa Barbara, CA 93101.

Dear friends,

We met in Bozeman

The board of the High Country Foundation met in Bozeman, Mont., Saturday, Sept. 18, to poke around at a preliminary version of the 1994 budget, to hear staff member Steve Hinchman describe how past and present issues of *HCN* will be put onto an electronic format, to talk about the need for diversity on the *HCN* board — both ethnic and vocational diversity, and to hear publisher Ed Marston say that radio is not in *HCN*'s immediate future, although television may be. (Salt Lake City television producer Mike Youngren is making a 15-minute video to test whether there is a market for an hour-long program based on *HCN*'s view of the West.)

Normally, board meetings take up the full day, and more. But this one raced to an early ending, allowing board and staff to adjourn to a hillside outside Bozeman, where they stood in a circle to share their memories of Sally Gordon, the board member who was killed by a pickup truck last month on a rural road.

We recalled Sally's aliveness, her enthusiasm, her raucous laugh, and her inability to contain herself. Our sense was that she would have loved to be diplomatic and quiet at *HCN* board meetings; instead, she was blunt and to the point.

Several members of the board and staff had attended Sally's funeral in Buffalo, Wyo., and some of us in the circle were surprised to hear that 500 or so of her friends and neighbors had attended the service in Buffalo's Union Congregational Church. We knew, of course, that Sally had more of a life than her three-times-a-year attendance at *HCN* board meetings. We hadn't realized, until we were told of the outpouring of grief at the funeral, just how much more of a life she had had.

We knew she had owned a mail order business in Sheridan from 1986 to 1990. But we hadn't known she was president of the Johnson County Library Foundation Board, or that she served on the Northwest Wyoming Family Planning Board, the Buffalo Enhancement Committee of the Big Horn Economic Development Board, the Buffalo YMCA board, and the board of the Family Crisis Center in Buffalo. Or that she was an accomplished pianist.

Her physical presence was recalled for us by Diane Josephy Peavey, also from a ranching family, who read from a radio piece she produced about Sally:

"Sally was very tall. No, she was very long. Her legs were long and carried her forward in strong, broad strides, her long arms swinging free by her side. Her strawberry blond hair hung in straight, long strands around her face — a face dominated by a wide, smiling mouth and by direct eyes that studied you as if to better absorb your words. ...

"She is everywhere with me as I try to understand her death. I weep for her husband and her two young girls, who lost their energetic and compassionate wife and mother.

"She was only a 37-year-old woman on an early morning walk along a quiet Wyoming road. It was such a simple thing to do."

After the memorial service, the board went to a park in Bozeman, for a potluck with subscribers from around the region. Emily Swanson of Bozeman, who organized the meeting and potluck, had been unable to find a hall for the potluck, so the evening — chilly even by Montana standards — turned into something of a physical test, which everyone passed with blue lips and red ears.

The board members who attended the meeting were president Karil Frohboese of Park City, Utah, Maggie Coon of Seattle, Wash., Geoff O'Gara of Lander, Wyo., Dan Luecke of Boulder, Colo., Victoria Bomberry of Stanford, Calif., Michael Ehlers of Boulder, Colo., Judy Jacobsen of Boulder, Colo., Diane Peavey of Carey, Idaho, Farwell Smith of McLeod, Mont., Emily Swanson of Bozeman, and Lynda Taylor of Santa Fe, N.M.

Disclosure

The foundation established by John Livermore, Public Resource Associates, was one of the initial donors to *HCN*'s Great Basin project. Livermore is featured in this issue's lead article.

Additional support for the Great Basin project has come from the Nevada Humanities Committee, the Funding Exchange, the Nature Conservancy, the University of Nevada at Reno and numerous individual donors.

A final emendation

There are some incidents that are the word equivalent of tar babies, and the story about whether or not David Brower compared loggers to guards in concentration camps is one of them. In the last issue of Dear Friends, we wrote that Dick Cavett, on his TV show, had asked David Brower: "What do you say to people who complain that environmentalists cost people their jobs?"

We had Brower answering Cavett. But Brower tells us that it was Cavett who answered his question by saying: "I supposed a lot of people lost their jobs when they closed the furnaces at Dachau." Then Brower says, Cavett was so shocked by the answer he, Cavett had given, that he changed the subject.

The above version may or may not be right. But whatever the case, it's the last correction.

— Ed Marston for the staff

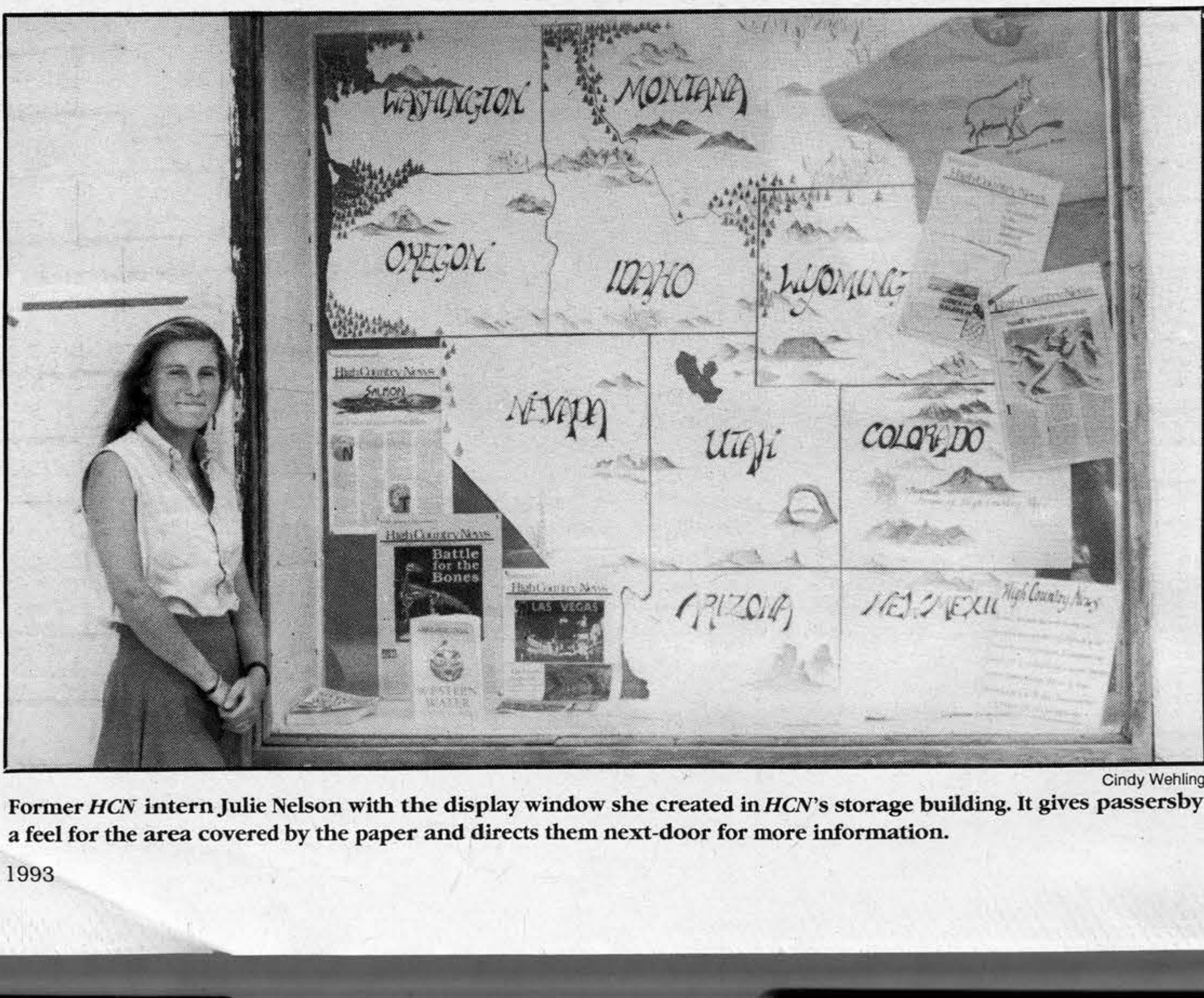
BULLETIN BOARD

FOR GREEN ENTREPRENEURS

The Common Ground Project of Prescott College in Arizona is hoping to unite business and environmental interests at a conference on "Environmental Entrepreneuring: People, Jobs and the Environment." Set for Oct. 15-17 on the college's Prescott, Ariz., campus, the get-together features 35 workshops including discussions on how to start or "green" a business network with environmental business people and learn the philosophy of environmental entrepreneuring. Contact Derk Janssen or Sue Ellinger, Common Ground Project, 220 Grove Ave., Prescott, AZ 86301 (602/776-5109).

CHANGE ON THE RANGE

How will range reform decisions made in Washington, D.C., affect ranchers and the environment in the West? The League of Women Voters of Utah is sponsoring a town meeting to discuss this issue at the Yarrow Hotel in Park City, Utah, Oct. 7 at 7 p.m. Speakers include Bureau of Land Management Director Jim Baca, *High Country News* publisher Ed Marston, BLM riparian specialist Wayne Elmore, and Rose Strickland, chair of the Sierra Club's grazing subcommittee. For more information, call the League of Women Voters of Utah (801/272-8683).



Cindy Wehling

Former *HCN* intern Julie Nelson with the display window she created in *HCN*'s storage building. It gives passersby a feel for the area covered by the paper and directs them next-door for more information.

WESTERN ROUNDUP

Critics say big jets and national parks don't mix


Roger Hayden/Jackson Hole News

"737 Earful" is the name of a climbing route in the Grand Teton peaks

At the mouth of Death Canyon in Wyoming's Grand Teton National Park, a column of ice forms on the granite cliffs each winter. Jagged peaks of the nearby Grand Teton and Mount Teewinot stab white spires into the blue sky.

But one of the ice wall's climbing routes has a curious name: "737 Earful," called that by climbers who can feel the rock vibrate as aircraft thunder in and out of the country's only commercial airport located within a national park.

Another kind of thunder is again rolling over the valley as Jackson Hole Airport prepares for what could be an unprecedented round of expansion.

A consultant hired by the airport board has presented five alternatives for growth that critics say focus on economics and not the peace and tranquility expected in a national park. All but one call for extending the 6,300-foot runway more than 2,000 feet. None is based on protecting the park.

"Somewhere back in the weeds are park values," says Sue Trigg, a longtime Jackson resident and critic of airport expansion.

Airport officials say an extension is necessary to prevent runway overruns, four of which have occurred since 1985.

"If we had just a few feet more on the runway, we wouldn't have had those incidents," says Bill Meckem, airport board chairman. "Our responsibility is to make the airport as safe and efficient as possible."

But critics charge that longer runways would do little to increase safety, while inviting more and larger planes loaded with an increasing number of passengers.

Trigg and others contend the safety argument is flawed because airlines can adjust weight to ensure safety regardless of runway length. Dropping weight to take off from Jackson Hole requires cutting back on a small number of passengers during the worst conditions. Critics say airlines should be able to live with that.

"Enough is enough," says Terri Martin, Rocky Mountain regional director for the National Parks and Conservation Association. "The current planning process must be reoriented away from accommodating endless growth," Martin adds. The range of alternatives, she says, "utterly fails to respond" to park values.

Until recently, the concerns expressed by Trigg, Martin and others were largely ignored.

But on Sept. 1, Teton County commissioners joined the chorus. They criticized their appointed airport board for ignoring the park and failing to follow the direction given them by the town and county. Commissioner Dail Barbour said the range of alternatives "doesn't leave much room for park values. We'd like to see a reformulation of those."

And earlier in August, Park Superintendent Jack Neckels listed 40 points that he said should be considered in the current planning process. They included restricting airspace and overflights above the park, installing a control tower to direct flights away from the park, removing some ground support services, limiting use of the airport to quieter planes, and adjusting the so-called "noise ceiling."

In his statement to the board, Neckels suggested, "You may also deem it necessary to look at an alternative of eventual elimination of the airport. This is a viable option that should be comprehensively addressed under the National Environmental Policy Act."

Neckels also warned that the airport's final master plan "must recognize, quantify and qualify impacts of the airport on the park." Terri Martin says Neckels was referring to a recent court case in which her organization prevailed against the Federal Aviation Administration. In that case a federal court ruled that the FAA acted unlawfully when it approved the siting of an airport near Glen Canyon National Recreation Area in Utah. The agency had determined that noise at the Cal Black Memorial Airport would double, but concluded it would have no significant impact on the park.

The problem came in the FAA's use of measurement standards designed for urban airports — not airports located in or near national parks.

The "FAA substituted its subjective evaluation for that of recreational users instead of attempting to ascertain the actual impact on the users themselves," the court ruled. Martin said the ruling makes the Park Service responsible for developing a method to measure impacts within a park. "You've got to have some kind of standard to reflect the park setting," she said.

Pressure exerted by Park Superintendent Neckels and other airport critics bore fruit in late September. County commissioners and the Jackson Town Council added three alternatives to the five presented by airport board consultants. All call for no more than 1,000 feet of runway extension. One also suggests using a new Styrofoam-like material to stop runway overruns.

For more information or to comment, contact the Jackson Hole Airport Board at Box 159, Jackson, WY 83001.

— Roger Hayden

Roger Hayden is a veteran reporter in Jackson, Wyoming. He writes for the *Jackson Hole News.*

Is the Jackson Hole airport 'doomed'?

Larry Rockefeller, the man whose grandfather donated a large parcel of land to Grand Teton National Park, says the Jackson Hole airport should move.

A lawyer with the National Resources Defense Fund, Rockefeller came to Jackson recently to celebrate the 50th anniversary of his father's gift. He also had a warning. In a speech, Rockefeller told Jackson and Teton County officials that the airport was "doomed" because of its location within a national park. He suggested moving the facility to Daniel, 55 miles south of Jackson.

The Rockefeller family donated 33,000 acres to Grand Teton National Park in 1943. Approximately 40 acres of that land are within the 550-acre airport. Rockefeller said if the airport grew out of its current boundaries it would be subject to removal under a "reverter clause" in his father's agreement with the park. The agreement states that the donated property must be used for park purposes only.

Rockefeller said that no one ever imagined the airport would grow to its current size. The airport's agreement with the Department of Interior expires in 2013. Two 10-year extensions are optional after that.

He suggested Interior Secretary Bruce Babbitt review the airport's operation as he has been reviewing other policies for federal lands. Rockefeller said the growth of the airport and rapid development of private lands threatened "the natural quality that drew people here in the first place."

-R.H.

Does Aspen need thousands more skiers?

SNOWMASS VILLAGE, Colo. — "I don't feel it's in the best interest of the public to see that market share go steadily downhill," says Veto J. "Sonny" Lasalle, pacing before a marker-scrawled easel. "That customer is not only yours; he's mine, and I want him to have that quality experience."

Lasalle is not an economist addressing a corporate board of directors. The man with the short-cropped silver hair is supervisor of central Colorado's White River National Forest. His audience is a gathering of environmentalists, local officials and executives of the Aspen Ski Company, who are seated in a dining room of the ski company's Snowmass Lodge.

The Forest Service wants to allow the ski company to build a two-stage gondola, 10,000 square-foot restaurant, and more than 500 acres of new ski terrain on Burnt Mountain. The mountain sits adjacent to the company's existing ski development at the town of Snowmass Village and on the edge of Colorado's most popular wilderness area, the Maroon Bells.

The ski company, owned by the Crown family of Chicago, says Burnt Mountain is the key to its future. Without new terrain on Forest Service lands, a new portal and upgraded lifts, the company says skiing at Snowmass will become as congested as an L.A. traffic jam, and customers will leave for rival resorts at Vail and Steamboat Springs. Without a gondola, Snowmass Village will continue to be a ghost town in the summer, and the company's wish for an interlinking gondola system between all four of its resorts from Aspen to Snowmass Village will never come true.

For environmentalists and other critics, Burnt Mountain is the last chunk of the once-wild Roaring Fork Valley, an island of undeveloped land in a sea of carved-up mountains. The upper valley's surviving herd of elk uses the mountain's eastern flank as a migration corridor and a summer calving ground.

"Burnt Mountain provides a wilderness-like experience that doesn't feel like anything else around here," says Pitkin County Commissioner Wayne Ethridge.

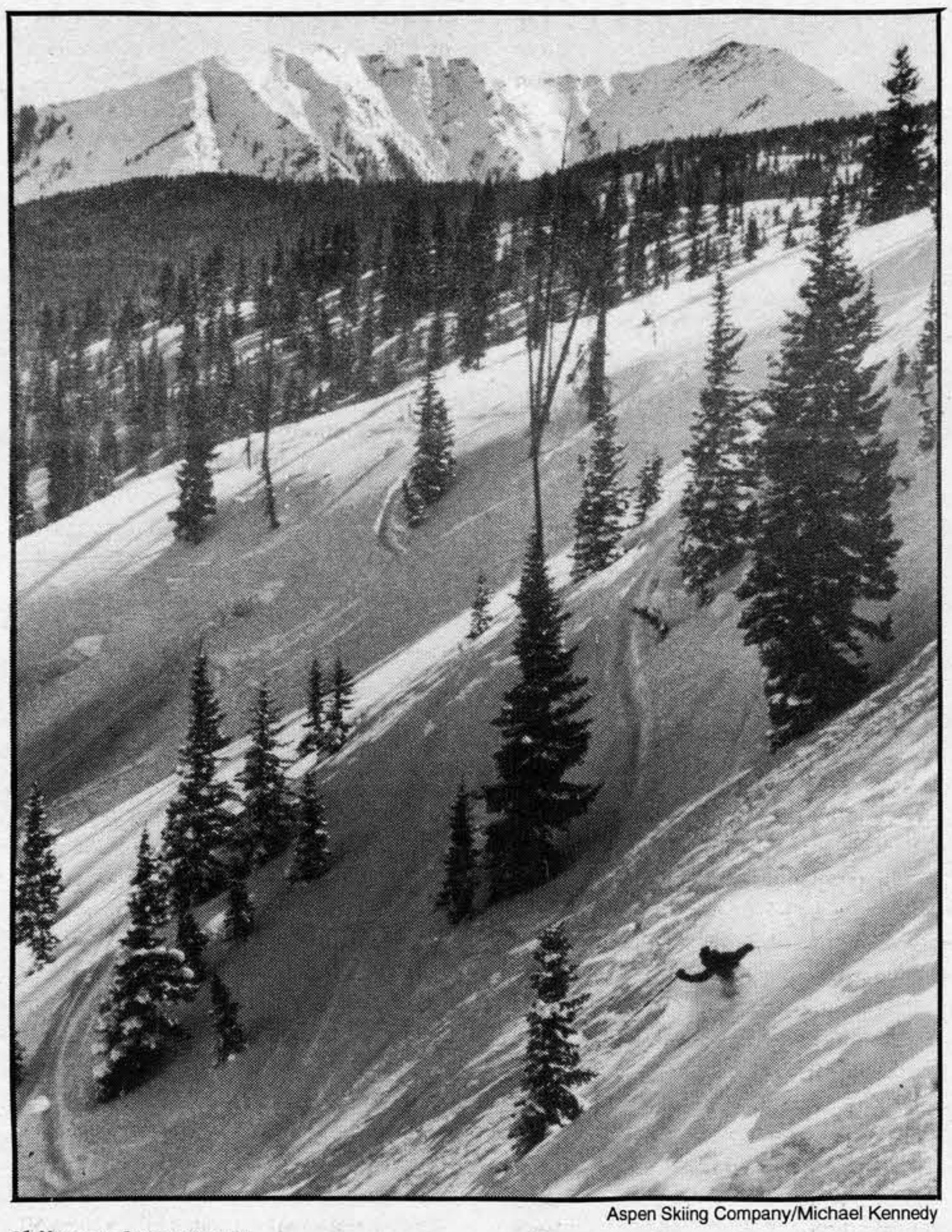
Sonny Lasalle is the man on the spot. His staff at the Aspen Ranger District has already waded through more than 1800 letters on its Snowmass Ski Area draft Environmental Impact Statement, released in May. A final decision is expected by the end of the year. The agency's decision hinges on a central question: How much damage to public lands should the Forest Service accept in accommodating a multimillion dollar ski corporation?

Lasalle, who oversees 11 ski areas on the White River National Forest, says he hasn't made up his mind yet. "I don't know where we're going to come out, I really don't," he says.

Environmentalists sitting around the table fear they know all too well where Lasalle will come out. They say he has already shown where his sympathies lie by choosing a preferred alternative in the draft EIS that is remarkably similar to the company's own plan.

That alternative, in addition to the Burnt Mountain development, calls for 300 acres of new skiing within the existing development, 300 acres of new snowmaking capacity, five new chair lifts, and a 400-vehicle parking lot. All told, the plan increases the ski area capacity 35 percent, from 9,380 skiers per day to 12,670. The scenario also assumes that private developers will construct 134 residential units and more than 15,000 square feet of commercial buildings in a new East Village below Burnt Mountain.

In making that choice, Lasalle overrode the more moderate recommendations of his staff. Carmine Lockwood, the Forest Service's project manager for Burnt Mountain, says his interdisciplinary team wanted the gondola on an already-developed part of the mountain and, to protect the elk herd, no ski trails on the east side of Burnt Mountain.



Aspen Skiing Company/Michael Kennedy

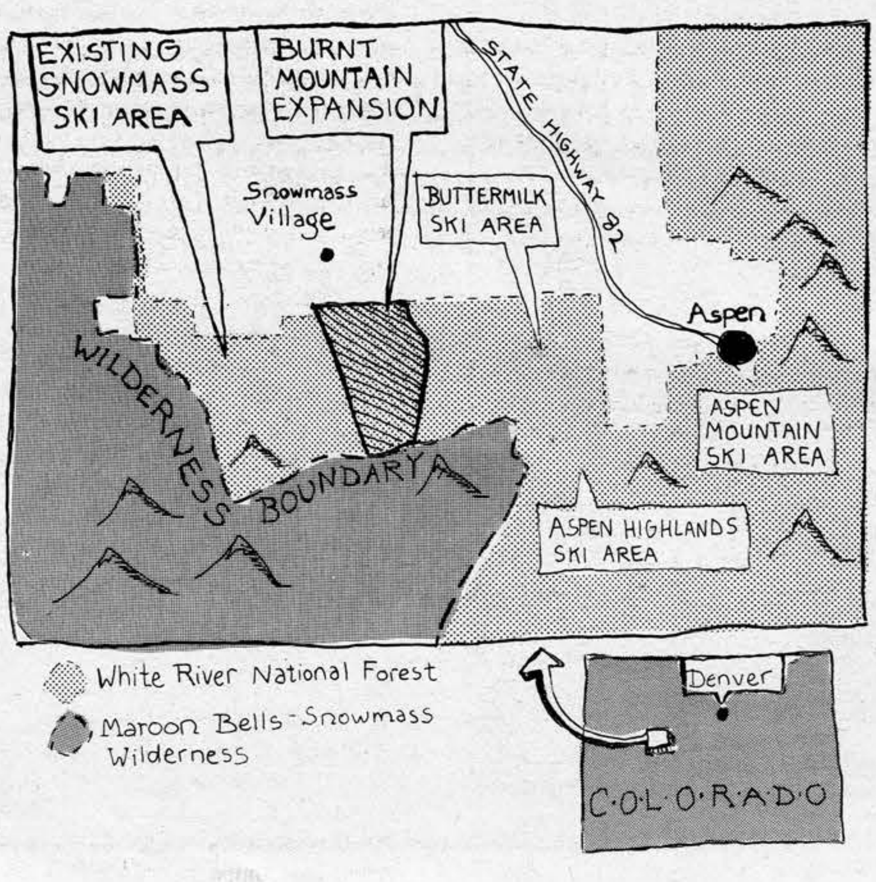
Skiing at Snowmass

"The rationale for that recommendation is there when you study the impacts," he says.

Lockwood's team found that the agency's preferred alternative would wipe out 65-to-75 percent of the 200-head elk herd. In addition, the gondola and restaurant at the summit would create a large visual impact and open access to the most remote section of the Maroon Bells Wilderness. Erosion from building lifts and ski trails on the mountain's east side would also degrade riparian habitat.

Why would the agency tilt toward the ski company? The Forest Service's Lockwood says past decisions inclined it in favor of downhill skiing. Much of the decision-making process, including the crucial decision to include Burnt Mountain in the Aspen Ski Company's permit boundary, was done years ago, beginning with the agency's original 1964 master plan for the ski area. Subsequent documents, including the 1985 forest plan, reinforce this bias, he says. "Sonny has a lot of latitude."

Back at the meeting, Lasalle tells the group the Forest Service has a duty to provide high-quality skiing to the public, including the international tourists who are increasingly pouring into American ski resorts. It's in nobody's interest to see ski areas go belly-up like the nearby Purgatory, he says. Although Snowmass is not in trouble, and in fact, is the most lucrative of the Aspen Ski Company's resorts, he says allowing it to expand onto Burnt Mountain is a "preventative measure."



Some of the group squirm in their seats. The slim hope of finding common ground between the ski company, Snowmass Village and the environmentalists disappears. Jack Hatfield, president of a local environmental group, Friends of Burnt Mountain, unveils a counterproposal. He suggests allowing new ski lifts and trails on the western side of Burnt Mountain and creating a 1,000-acre wildlife easement on the east side. Hatfield's plan would build the gondola on the developed part of the resort, both to protect wildlife and keep tourists near Snowmass Village's shops.

"I'm not willing to trade resources for a view," says Hatfield.

His proposal doesn't raise an eyebrow from executives with the Aspen Ski Company. "There's an economic reality here," says company vice president Fred Smith. "If you double the lift capacity, you've got to double the acreage." Smith says the company has already compromised by agreeing not to cut ski trails on Burnt Mountain's most sensitive elk habitat.

As the meeting concludes, Lasalle says, "I'm not going to do anything deliberately to destroy an ecosystem, but you can't do anything that won't impact an ecosystem."

The environmentalists are disappointed. "Sonny sounds like a ski company employee," says 73-year-old Dottie Fox after the meeting. She is president of the Aspen Wilderness Workshop. "The Forest Service is right in bed with the ski developers, just like it is with the timber and mining industries."

At the meeting, Lasalle tries to provide some perspective. "I can tell you that this is not just happening in Aspen," he says. "There's a proposal at Copper, Vail and Adam's Rib. It's occurring all over. All I know is we have job security for a hell of a long time," he jokes.

Ski resort expansion is booming in Colorado. Since 1990, the Forest Service has approved 90,000 acres of new ski terrain in Colorado, a whopping 57 percent increase. The agency has another 80,000 acres both inside and outside existing permit boundaries that it can consider for future ski development.

Critics say the Forest Service is approving ski expansions without a plan.

"No one in the Forest Service sits down and says, 'Where do we want to put new ski areas,'" says Tom Lustig, a staff attorney with the National Wildlife Federation in Boulder. "It's driven by the developer, and the Forest Service almost never says no."

Lustig says the Forest Service also never analyzes the impacts its expansion decisions have on other ski areas, especially those that are hanging on the brink of financial insolvency. Approving a new area or greatly expanding an existing one can lure skiers away from other areas, bringing on bankruptcy, he says. That wreaks environmental and economic havoc on small communities (*HCN*, 5/8/93).

"It's a vicious circle," says Bill Curtiss, an attorney with the Sierra Club Legal Defense Fund in San Francisco. "The forest supervisor gives someone an expansion. Then the others start saying, 'Hey, we can't maintain our market share without a larger subsidy.'"

The Burnt Mountain ski expansion is "not about people who can't find a place to ski," he says. "It's about one big ski company making money instead of another. Where does the public benefit from that?"

Curtiss, who reviewed the draft EIS at the request of Aspen environmentalists, says one reason the Forest Service seldom refuses new expansions is that skiing, unlike wilderness and wildlife, brings in money in the form of permit fees.

"Burnt Mountain means some real money in Sonny's in-box," he says. "They are willing to give away some intangible values for hard cash."

The agency denies that it defers to the expansion demands of competing ski resorts.

"I honestly don't think we do that. We don't have a goal to have Vail as a standard which all other areas have to match," says Carmine Lockwood. "Each area has a market niche."

Yet competition over market share is a theme pushed hard in the draft EIS. Snowmass competes with both Vail and Steamboat, the document notes, and both of them have greatly increased their skiing capacity over the last decade. The agency says "the relative lack of capital investment" at Snowmass has caused the resort's market position to deteriorate relative to Vail and Steamboat. It notes that Snowmass' Colorado market share slid from just over 8 percent in the early 1980s to 6-to-7 percent now.

Bob Maynard, president of the Aspen Ski Company, says that although the number of skiers at Snowmass has remained constant over the last decade, that drop in market share indicates that Snowmass is less desirable than other destination resorts. "That should concern everyone in the valley," he says.

But Curtiss says there are many possible explanations for the decline, including snow conditions, the national economy and not enough skier accommodations. "The draft EIS simply takes the Aspen Ski Company's word that adding Burnt Mountain will cure the problem," he says.

Opponents also criticize the Forest Service for not considering how Snowmass Ski Area could be improved and expanded without touching Burnt Mountain.

"What's wrong with the rest of the mountain?" asks County Commissioner Wayne Ethridge. "They are saying it's Burnt Mountain or nothing." Ethridge, elected twice on an anti-Burnt Mountain platform, recommends new lifts and other improvements to the existing ski area before developing Burnt Mountain.

Supervisor Lasalle says his agency can control the impacts of new development on Burnt Mountain while meeting the needs of the skiing public. "I have faith in mitigation," he says. "Mitigation is what we do at the Forest Service."

On Burnt Mountain

"This is where the new summit station will be," puffs Brent Gardner-Smith, the Aspen Ski Company's director of planning, as he climbs the last rocky feet to the top of Burnt Mountain.

The 360-degree view is, as they say, awesome. The 14,000-foot Maroon Bells loom to the west. To the south, ski trails at the company's other resorts, including Buttermilk and Aspen Mountain, slice through dark conifer forests. And below, nestled in a valley, lies Snowmass Village, looking like a toy town.

Beyond the town is the Roaring Fork Valley, where late-summer traffic weaves through a maze of orange cones and highway construction workers widening Highway 82, dubbed "killer 82" because of its high accident rate, to four lanes. More than 70,000 people now call the valley home and a thousand more arrive each year, many of them building second homes (*HCN*, 4/5/93). The dark side of growth is on everyone's minds, even Brent Gardner-Smith's.

"We fully realize that if we trash the environment we lose business," says Gardner-Smith. "We are as threatened by growth as anyone. But the question is, 'how do you manage success?'"

The former *Aspen Daily News* reporter, who says he often wrote highly critical articles of the Aspen Ski Company before joining the company's staff two years ago, concedes that assessing Burnt Mountain's impact is not easy.

"Is our plan a growth accommodater or a growth-promoter? It's probably a little of both," says Gardner-Smith. "But it has been an important catalyst to get the community to deal with growth issues that will have to be dealt with whether Burnt Mountain is developed or not."

The cities of Aspen and Snowmass Village and Pitkin County recently agreed on a transportation strategy for the valley, including a public vote this November on a half-cent sales tax and a $30 million bond to finance an expanded bus system and purchase of railroad rights-of-way for a light rail system.

The plan is designed to combat traffic congestion and air pollution. The Environmental Protection Agency recently designated Aspen and a portion of Pitkin County surrounding the city a non-attainment area for exceeding federal levels of PM10, airborne particulates emitted by cars and wood burning stoves, among other things. The Forest Service can't approve Burnt Mountain unless it can show that any increase in automobile traffic will be offset by reductions elsewhere. The Forest Service will rely on the new plan to mitigate off-site impacts of the expansion.

Local environmentalists worry that Burnt Mountain's off-site impacts will be as severe as those on-site.

"This is going to generate a lot of growth," says local Sierra Club president Dawn Keating. "The valley's already maxed out."

Bill Curtiss of the Sierra Club Legal Defense Fund agrees. "Everyone is going to have one more layer of regulation" imposed on them to compensate for Burnt Mountain, he says, starting with the new sales tax. "That's the price you pay."

Curtiss also says the Forest Service is making a mistake if it relies on the new transportation plan to mitigate air pollution and traffic problems. "If the plan fails, the ski company can say 'tough.' No one will say, 'wait, you got your expansion based on the success of this plan. Take down your gondola.'"

Walking among charred snags from a turn-of-the-century fire which gave the mountain its name, ski company planner Gardner-Smith explains how the company will soften its impact on the landscape. He says the restaurant, despite being a mere 50 feet from the wilderness boundary along the summit, will sit low to the ground and feature a live alpine floral roof to blend into the scenery. New ski trails will remain largely ungroomed with a smattering of live trees, and a combination of ropes and rangers will discourage any summer gondola-riders who want to venture into the wilderness.

But environmentalist Connie Harvey, who founded the Aspen Wilderness Workshop in 1964, wonders how the Forest Service could even consider the summit development given its mandate to protect wildlife and wilderness. "How is running a gondola up to a restaurant 50 feet from the wilderness boundary protecting wilderness?" she asks. "How is cutting old-growth forests in prime elk habitat protecting wildlife? To me, that's scandalous."

Gardner-Smith talks of the company's big picture: linking the Burnt Mountain gondola with a system of gondolas to the company's other resorts. Someday tourists in Aspen will be able to hop on a gondola and speed across the ridgetops to Snowmass for a day of skiing, he says.

Company president Bob Maynard calls the gondola "the most environmentally sound thing you could do. It gets people out of their cars. People hanging from a cable can do no harm."

It's a vision some residents hope never to see.

"How far can you go before you destroy the goose that laid the golden egg?" asks Dottie Fox. "We have a strange group of people here who can't think beyond the tips of their Rossignols. I love to ski, but there has to be some sort of balance."

— Paul Larmer

Paul Larmer is *HCN* assistant editor.

For more information, contact the White River National Forest, Aspen Ranger District, 806 W. Hallam St., Aspen, CO 81611, the Aspen Wilderness Workshop, (303/927-4483), or the Aspen Ski Company, (303/923-2085).

Paul Larmer

Brent Gardner-Smith, Aspen Ski Company's director of planning, leans against a charred tree on the top of Burnt Mountain

HOTLINE

Wyoming hikes grazing fees

For years some Wyoming ranchers have enjoyed low grazing fees on state land while other, usually smaller, operators paid higher rent for private land. But a unanimous vote Sept. 2 by the Board of Land Commissioners hiked fees on state land by 40 percent. The move came after a week of debate during which many large ranchers expressed vehement opposition. The five-person board said the raise in fees was necessary to generate money for Wyoming schools and to decrease the disparity between grazing fees on state and private lands. The increase, the third in 20 years, ups the rate from $2.50 to $3.50 in 1995. Surveys showed ranchers paid $9.98 for each animal unit month on private land. The decision drew strong criticism from Wyoming Sen. Malcolm Wallop, R. He said higher fees in Wyoming undermine his opposition to higher federal fees urged by Interior Secretary Bruce Babbitt.

In Utah, water grows on trees

Utah residents use more than twice as much water as other Americans, according to a 1990 study just released by the U.S. Geological Survey. Living in the second driest state in the nation, each Utahn uses an average of 218 gallons of water for domestic needs every day. Watering — and overwatering — of lawns and gardens during the summer months accounts for half of all annual domestic water use, according to the survey. Utah water officials say the high consumption is due in part to low water prices, a lack of meters and old attitudes from 150 years of building dams and reservoirs, reports the *Salt Lake Tribune*. Other Western states filled out the top five in the survey: Nevada was second with average per capita water use at 213 gallons a day, Idaho was third at 186 gallons a day, Wyoming was fourth at 163 gallons per day and Arizona was fifth at 105 gallons per day.

Custer Association's last stand

A private group's 40-year relationship with the Little Bighorn Battlefield in Montana has had its last stand. The National Park Service recently severed any connection with the Custer Battlefield Historical and Museum Association after conflicts over historical interpretation came to a head. The group opposed the Park Service's move to change the monument's name from Custer Battlefield to Little Bighorn Battlefield. It also refused to sell *Bury My Heart at Wounded Knee*, a chronicle of the mistreatment of the American Indian in the West by Dee Brown, at the monument bookstore. The Park Service is now searching for another organization to replace the Custer association.

Wolves start a family in eastern Montana

AUGUSTA, Mont. — As debate continues over wolf re-introduction in Yellowstone National Park, a young family of gray wolves — the first in more than 50 years — has settled near here and struck a balance with local ranchers.

At least four pups were born in late April, and observers like Joe Fontaine, leader of the U.S. Fish and Wildlife Service's Montana Wolf Recovery Project, are delighted. This is the only known breeding pack east of the Continental Divide in the lower 48 states.

Five known breeding packs now inhabit the agency's recovery project area in Montana, Fontaine says, but the other packs are on the west side of the mountains. The project's ultimate goal is to see 10 breeding packs established in each of the agency's three target areas. The other two areas, in Yellowstone and central Idaho, have no known breeding packs.

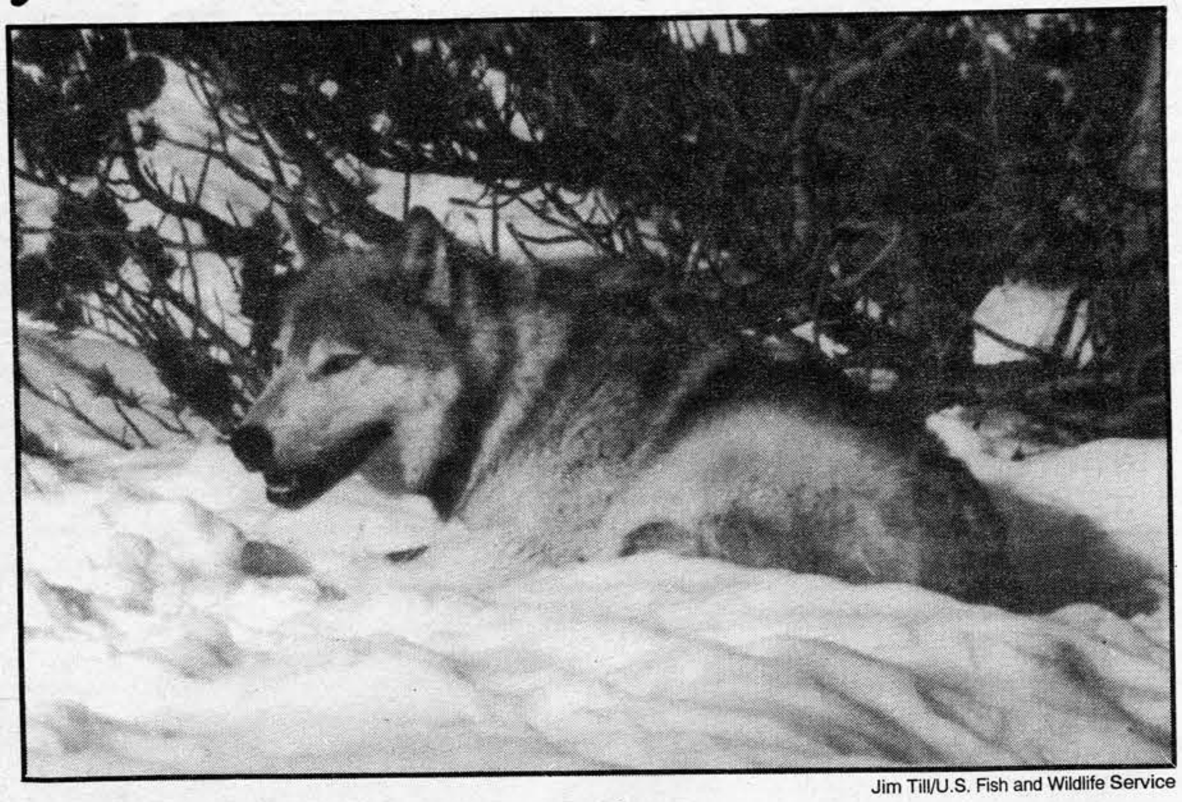
"I think these wolves will succeed," Fontaine says, "but the real question is, will they take any livestock?"

So far the answer has been "no," and local landowners have more important things to worry about than a fledgling family of wolves, says John Cobb, an Augusta-area rancher and member of the Montana Legislature.

"The wolves aren't bothering anybody right now, so it's a live-and-let-live situation," says Cobb. "But I think the issue will be a lot hotter two or three years from now. There will be more wolves and maybe one will kill something that it's not supposed to be killing," he adds.

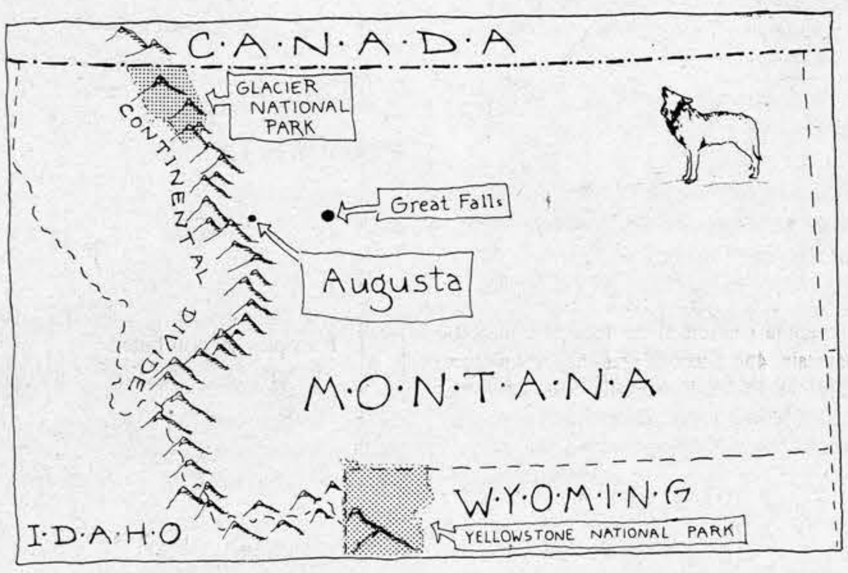
Although ranchers like Cobb have adopted a wait-and-see attitude, others in the livestock industry aren't so trusting.

"Our main concerns with wolves is that they've always fed on whatever is easiest," says Jim Peterson, executive vice president of the Montana Stockgrowers Association. "If there's sheep or cattle around, they'll feed on them."



Jim Till/U.S. Fish and Wildlife Service

This 122-pound male leads the Augusta-area pack



So far, the Augusta-area wolves, which are denned in an area grazed by livestock, have rejected beef and focused their diet on abundant wild game, particularly white-tailed deer. "On several occasions, I've seen the wolves approach cattle and they've passed within a foot of one another, both paying attention, but with nothing happening," says Seth Diamond, a wildlife manager for the nearby Lewis and Clark National Forest.

But the area hasn't always been so naturally bountiful. In late May, when no newborn deer or elk calves were on the ground and nutritional demands on the nursing female were high, wildlife officials left road-killed deer for the pack on two occassions.

If game remains abundant, biologists say the pack's range will be about 250 square miles. But the figure could rise to 400 square miles if the game supply tapers off. Fontaine plans to track the pack's movements with radio collars. The 122-pound male — reportedly the largest wolf ever captured in the Lower 48 — is already collared, and Fontaine says he hopes to collar a few pups sometime this fall.

The Augusta-area wolves aren't the first breeding pack on the east slope of the Rockies in recent years. A pack denned in a livestock pasture near Glacier National Park in 1987. Although the wolves left the local cows alone, they were destroyed when they began preying on livestock several miles away.

— William Brock

William Brock is a staff writer with the *Great Falls Tribune* in Great Falls, Montana.

HOTLINE

State sues miners

The state of Colorado sued the owners of a bankrupt coal mining company Sept. 17 for failing to reclaim their 11,000-acre mine in the Rocky Mountains. The lawsuit against three principle officers of Mid-Continent Resources marks the first time a Western state has held coal company officials personally liable for reclamation, says Steve Renner, the administrator for Colorado's coal mining program. "This puts us in the driver's seat," says Renner. "It will certainly send a message to the mining industry that we want every operator to fully reclaim their site." Bill Jochems, president of the Crystal Valley Environmental Protection Association, based in Redstone, Colo., says the decision is gratifying, but surprising. "From my previous conversations with the state, everything was always fine up there," he says. Jochems' group and the U.S. Forest Service have criticized the state for allowing Mid-Continent to post a rock-dust plant as a reclamation bond that even the company admits is not worth its $3 million price tag (*HCN*, 9/6/93). In related news, the state Mined Land Reclamation Board voted Sept. 22 to foreclose on the rock-dust plant. Steve Renner says the state will try and sell the facility, then seek money from company officers and bankruptcy court to do its own reclamation.

A 'Holy Land' is saved in Montana

Champagne corks popped.

After nearly seven decades of protracted negotiation and conflict, the Forest Service, loggers and environmentalists toasted the government's successful acquisition of key wildlife habitat north of Yellowstone National Park Sept. 13.

The agreement, embodied in the "Gallatin Range Consolidation Act of 1993," sets in motion a series of land purchases and trades. They are aimed at protecting one of the largest elk herds in North America, prime grizzly habitat and spawning streams for pure strains of Yellowstone cutthroat trout.

Some areas within the 14 pristine drainages with their unroaded land are so revered by sportsmen they are known as "the Holy Land."

Along the Gallatin front between Yellowstone Park and Bozeman, Mont., the Forest Service will acquire by purchase and exchange roughly 80,000 acres of privately owned land in danger of being intensively logged or turned into subdivisions. Big Sky Lumber will receive about 16,000 acres, plus land or money to be determined later.

"This deal will be looked back upon as the single most important thing that was done to protect the biological integrity of the greater Yellowstone ecosystem during the last half of the 20th century," says Michael Scott, Northern Rockies field director for The Wilderness Society.

During the last year, the land acquisition bill almost died on a half-dozen occasions when congressional deadlines passed or tenuous arrangements between the Forest Service and timber companies fell through. Another setback occurred last month when, despite unanimous support from the White House, Montana's congressional delegation, Gov. Marc Racicot, R, and a broad coalition of public interest groups, Indiana Rep. Dan Burton, R, objected to a voice vote on a rule of order.

Burton erroneously charged that the consolidation bill, which was sponsored by Montana Rep. Pat Williams, D, would effectively add 70,000 acres to the size of Yellowstone Park and cost taxpayers $29 million over the next year.

The bill's proponents countered that the bill contained no pork and eliminated much of the difficult-to-manage checkerboard lands in the Gallatin and Madison mountains. These lands were deeded by the federal government to the railroads as an incentive for hastening non-Indian settlement of the West.

To placate Burton, supporters removed a $3.4 million congressional appropriation, agreeing instead to offer federal timber tracts of equal monetary value. The Nature Conservancy, the Rocky Mountain Elk Foundation, and the Montana Fish, Wildlife and Parks Department have pledged to come up with funding for the components of the bill requiring land purchase.

Finally, nothing could hold back a coalition bent on resolving the problems caused by checkerboard lands.

"We have been trying to acquire these critical inholdings since the 1920s and each time our efforts have failed — until, of course, this year," says Bob Denee, a negotiator with the Forest Service. Denee said another reason for success in 1993, was that the land consolidation act was not tied to passage of a Montana wilderness bill, which has failed over the last two decades.

—Todd Wilkinson

Todd Wilkinson free-lances from Bozeman, Montana.

BARBS

Attention, consumers: Just one Minuteman missile can light your home for a month!

A private consortium proposes incinerating nuclear warheads at the Hanford Nuclear Reservation in Washington, then converting the energy into electricity, reports AP.

Unclassifieds

DEFENDERS OF WILDLIFE — Vice President for program. National wildlife conservation organization seeks vice president for program to develop and implement conservation programs. Duties include strategic planning, acting as organization's spokesperson, budget preparation, working with board committees, supervising staff of 18 policy analysts, scientists, lawyers, education specialists, lobbyists and support staff. Qualifications include five years' management experience in environmental or related area, administering programs, overseeing budget preparation and implementation, strong writing and oral communications skills. Advanced degree in related field desirable. Send résumé, cover letter and salary requirements to Rodger Schlickeisen, President, Defenders of Wildlife, 1244 19th St. NW, Washington, D.C. 20036.

MEET NEW FRIENDS, West, Northwest, and nationwide. Outdoor Singles Network, established bi-monthly newsletter, no forwarding fees. $35/1 year, $7/trial issue and information. OSN-HCN, Box 2031, McCall, ID 83638.

CONSERVATION BIOLOGIST. Defenders of Wildlife is seeking a conservation biologist. Primary emphasis will be on the conservation of biological diversity. Responsibilities include monitoring development of federal/state biodiversity programs, conducting secondary research to guide policy decisions, integrating the latest scientific information into our conservation programs, and representing our programs to the scientific community. Ph.D. in conservation biology, natural resources or related field required; some policy experience preferred. Strong writing and oral communication skills a must. Salary commensurate with experience. Send C.V. with cover letter to James K. Wyerman, Director of National Conservation Programs, Defenders of Wildlife, 1244 19th St. NW, Washington, D.C. 20036. No calls, please!

SIERRA CLUB LEGAL DEFENSE FUND seeks attorney: The Northern Rockies office in Bozeman is seeking an individual with strong litigation background/court experience. Send résumé, writing sample and references. Minorities/women encouraged. 222 East Main St., #300, Bozeman, MT 59715.

CARETAKERS: Excellent qualifications, competent, ethical. Seeking long-term opportunity to manage home/ranch property with or without large animals. Remote location welcome/city location considered. Farm, pack train management, resort and multinational business experience. Intermountain West. Housing/reasonable income. Travel and/or limited personal care negotiable. Résumés, superior references. Peter Keys, Box 102, Hereford, AZ 85615 (602/647-7435). (1x18p)

JOB OPENING — Staff Director. Idaho Rural Council, a grass-roots membership organization founded in 1986 and focusing on family farm and rural community issues through community organizing and empowerment of members, seeks a staff director with experience in social change work to supervise three staff and raise funds. Starting date around Nov. 15. Salary: $17,500 to $25,000 depending on experience. Health insurance and generous vacation and leave policies. Location: Boise, Idaho. Send résumé, three references and writing sample to: IRC, P.O. Box 236, Boise, ID 83701, by Oct. 15. Phone inquiries encouraged, 208/344-6184. (1x18b)

EXECUTIVE DIRECTOR. Citizen Alert, Nevada's statewide environmental watchdog organization, seeks individuals interested in applying for executive director based in Las Vegas. Top applicants will have proven experience in fund-raising, computers, personnel management, interpersonal communications; ability to manage $300,000/yr. budget, work in cross-cultural settings, motivate grass-roots, staff, volunteers, working knowledge of Western U.S. culture, environmental and Nevada issues, leadership capabilities and ability to develop same in others. Send résumé and brief letter by Oct. 20 to "Search Committee," Citizen Alert, P.O. Box 5339; Reno, NV 89513. No phone inquiries. People of color and women encouraged to apply. (1x18b)

3/4 MILE ON COLORADO RIVER, just off I-70, minutes to Grand Junction, 114 acres (60 irrigated), in private, marvelous red rock canyon. Stone 6,000 sq. ft. 1890s home under big trees near waterfall and 5-acre lake with Canadian geese. Kokopelli bike trail, river trips. $500,000. Treece Land Sales, 303/858-3960. (2x18p)

AT THE END OF A COUNTRY ROAD. Unspoiled natural beauty surrounds this stunning 105±-acre country property near Paonia, Colorado. Enjoy your own views, stream, deer and elk. Country fresh 3 bedroom, 1-3/4 bath home nestled at the base of a majestic mountain. 45± acres of grass hay and pasture. $279,000. FB14. For details, call Bob Lario, RE/MAX Mountain West, 800/331-6090 in state, or 303/527-4877. (1x18b)

GREEN GROWS THIS GARDEN! An exciting opportunity in Moab's beautiful red rock country. Buy this well-established, profitable nursery business with lots of expansion potential. Price includes business; nice 3 bedroom home; 1 acre and lots of fruit trees. Tom or Suzanne, Coldwell Banker Arches Realty, Moab, Utah, 800/842-6622. (3x17b)

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(Required by 39 U.S.C. 3685)

1. Title of publication, *High Country News*
2. Date of filing, October 1, 1993
3. Frequency of issue, Biweekly
   A. No. of issues published annually, 24
   B. Annual subscription price, $28.00/$38.00
4. Location of known office of publication, 119 Grand Ave. (Box 1090), Paonia, CO 81428-1090
5. Location of headquarters of general business offices of the publishers, 119 Grand Ave. (Box 1090), Paonia, CO 81428-1090
6. Names and address of publisher and editor: Edwin H. Marston, publisher, Elizabeth A. Marston, editor, Box 1090, Paonia, CO 81428-1090
7. Owner: High Country Foundation, Box 1090, Paonia, CO 81428-1090
8. Known bondholders, mortgagees, and other security holders owning or holding 1 (one) percent or more of total amount of bonds, mortgages or other securities: None
9. Extent and nature of circulation:

	Avg. No. Each Issue	Actual No. This Issue
A. Total # copies printed	14,883	14,600
B. Paid circulation,		
1. Dealer/counter sales	51	0
2. Mail subscriptions	13,246	13,761
C. Total paid circulation (B1 and B2)	13,297	13,761
D. Free distribution samples	1,044	50
E. Total distribution (C&D)	14,341	13,811
F. Copies not distributed		
1. Office use (left over)	542	789
2. Returns from news agents	0	0
G. Total (E&F)	14,883	14,600

I certify that the statements made by me are correct and complete.

Edwin H. Marston, Publisher

Published in *High Country News* Oct. 4, 1993.

Help *High Country News* report on the West's natural resources and changing communities through the annual Combined Federal Campaign.*
Contribute to The High Country Foundation
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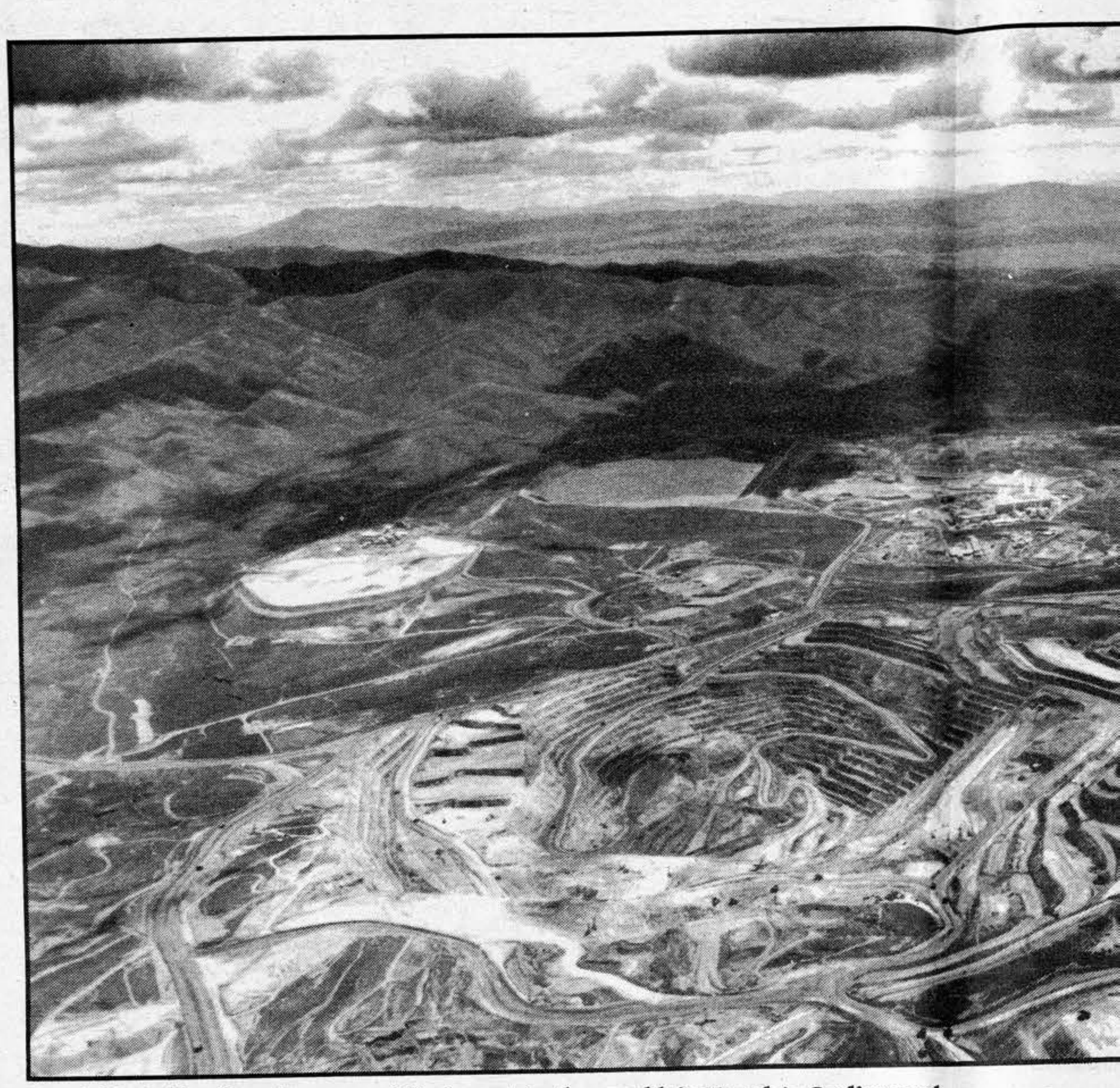
* the federal workplace charity drive

Two Nevadans in searcl

by **Jon Christensen**

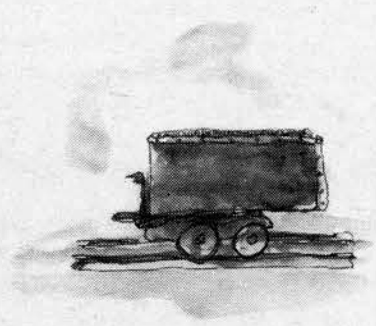


Barrick's Goldstrike mine, one of the largest in the world, in Nevada's Carlin trend

John Livermore helped set off the greatest gold boom in American history when he convinced Newmont Mining Co. to prospect for "disseminated gold" near Carlin, Nev., in the 1960s. Disseminated gold is sometimes called "microscopic" or "no-see-um" gold because ore particles are too small to show color in a prospecting pan. Each ounce of gold is diffused evenly through tons of rock in relatively low-grade deposits. These become valuable ore bodies when the price of gold rises high enough.

Geologists theorize that the stage for this latest gold boom was set millions of years ago when a tectonic collision added a chunk of Nevada to the North American continent. Disseminated gold deposits are concentrated in an area of northern Nevada where geologists say the two plates crashed together. Livermore was the first person to prove the theory.

The Carlin area, 23 miles east of Elko in northeastern Nevada, is now the richest gold mining district in the country, containing one-quarter of the known gold in the U.S. But Livermore, a modest man, tells the discovery story in a straightforward way, crediting colleagues at Newmont and others. He says the real boom in Carlin-type mines came when President Nixon unfettered the dollar from the gold standard and the price of gold skyrocketed. That galvanized mining companies to move mountains to get at Nevada's "invisible gold."



Miller calls these mines heroic as in: "This is destruction on a truly heroic scale."

Livermore is now a partner in three gold mines, and mining has made him wealthy. But the geologist still works out of a small office in Reno where technical journals, maps, books and magazines spill from every surface. The inside of his car looks about the same, with a prospector's pick and work boots thrown on top of the pile.

Livermore came to Nevada as a young man after World War II to follow what he calls his prospecting "instinct." Lanky and fit at 75, he still roams the backcountry, prospecting and visiting promising mining properties. He is also a lifelong member of the Sierra Club. As a member of a family of conservationists in the San Francisco Bay area, he was raised with a tin hiking cup in his hand.

Glenn Miller, 42, got to know Livermore because he has been the environmental pointman on mining in Nevada for 15 years. A professor of environmental and resource sciences at the University of Nevada, Miller came to Reno after finishing graduate school at the University of California in the late 1970s and working for the EPA in Georgia for a year. He was raised on a farm in northeastern Montana and looks like he could still buck a few bales.

Miller joined the Sierra Club in the early stages of Nevada's wilderness battles and was immediately taken aback by how "mining companies claimed wilderness would kill the industry." When he looked into their claims, he says, he found mining in the state was unregulated. Since then bringing mining under environmental control has consumed him.

While mining in Nevada boomed during the last decade, Miller has worked long hours for no pay, reviewing every new mine plan, every agency document and decision. Until last year, he chaired the Sierra Club's national committee on mining.

Soft-spoken but strong-willed, Miller says he prefers behind-the-scenes agreements with mining companies rather than protests and legal appeals. But he is not afraid to talk to hostile crowds, telling mine workers, for instance, why an inadequate environmental assessment of a project will delay job startups. He has paid a price for his activism: A private lab Miller owns with a partner has lost business because of his convictions.

Miller helped write Nevada's first mining reclamation law, adopted in 1989 by the state Legislature. Livermore worked with the Nevada Mining Association to gain industry support for the bill. When we first meet to talk about mining and the environment, both men emphasize that they don't necessarily represent their colleagues.

"A lot of people in industry think I'm too liberal," Livermore says.

"If John is seen as the left wing of the mining industry, I guess I would be seen as the right wing of the environmental movement," Miller says. "I've been accused of being too friendly with miners." Miller says that Livermore showed him that "not all miners wear black hats. But I sometimes wonder if the rest of the industry is listening."

Their caveats remind me of the rarity of real dialogue about mining reform.

Upside-down pyramids

Our travels together begin at the Reno airport. Barbara Rowell, a volunteer pilot for Lighthawk, the non-profit "environmental air force," has agreed to fly us over the mines of northern Nevada. As her single-engine Cessna 286 banks toward the rising sun, Livermore begins pointing out mines below. Every creek drainage, it seems, either has a mine in it or once did.

Livermore recalls tramping all over the ranges in the 1960s, when "we had the whole state to ourselves." Then the boom in the price of gold in the 1970s brought people flooding in to stake claims. We cross over legendary "trends" of gold deposits, where geologists surmise that fault lines in the earth's crust allowed geothermal water to permeate the surrounding rock with microscopic ore. Miller and Livermore name them as we pass: Getchell, Battle Mountain, Cortez. Today these deposits support massive complexes of open pit mines. Near Elko we fly along the Carlin trend, where 10 huge open pits pockmark the sage mountains, one after the other, for 50 miles.

The view from high above seems misleading in both its awesomeness and its simplicity. The pits look like the insides of misshapen hand-coiled bowls thrown by clumsy giants in the raw earth. But the busyness of buildings and pipelines and trucks suggests a Lilliputian industry neatly contained on a vast and empty landscape. Miller calls these mines heroic as in: "This is destruction on a truly heroic scale."

Nevada's current gold boom dwarfs any in the history of the West. It also reveals why the 1872 Mining Law, forged in the California gold rush, is ripe for reform. In the last decade the United States has gone from being an importer to an exporter of gold. U.S. production increased ten-fold to roughly 10 million ounces of gold a year worth around $3.5 billion.

Last year the General Accounting Office found that Nevada accounted for more than 80 percent of the $1.2 billion worth of hardrock minerals taken from federal lands in 12 Western states.

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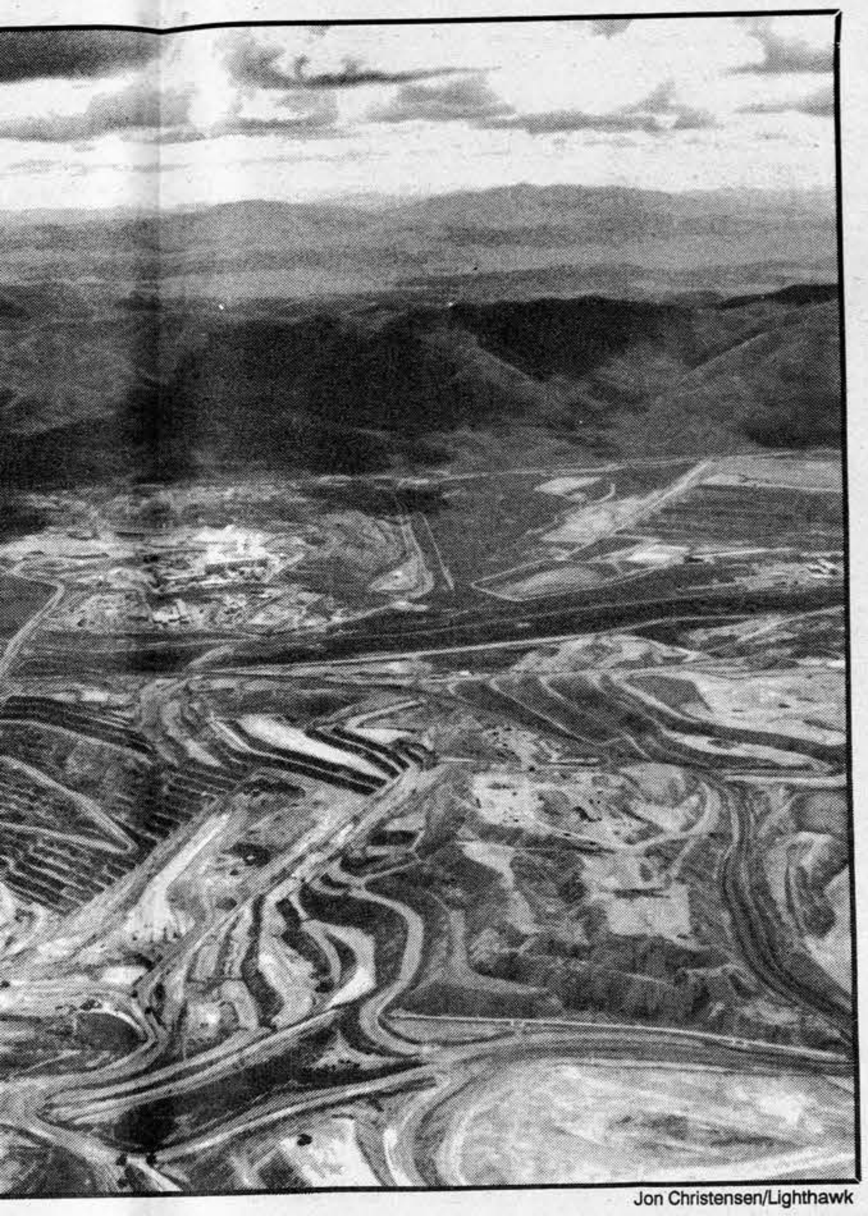

Jon Christensen/Lighthawk

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Almost all came from gold mines on public land in Nevada. Yet many of the mines are owned by foreign companies, and the U.S. Treasury receives no royalties. That, combined with environmental damage, is what keeps the call for mining reform alive.

As we land in Elko, Livermore asks what I think of the greatest gold district in the United States. I am dumbfounded by the scale; from the air the mines seemed like inverse pyramids, monuments to extraction.

Bumper stickers in the airport parking lot say: "Mining works for Nevada. If it can't be grown, it has to be mined."

On the ground

The Independence Range rises northeast of Elko, gently at first and then ruggedly to more than 10,000 feet. As we drive along its eastern flank, Livermore repeats an industry truism: Ore is where you find it.

Discovering gold or other minerals is often the result of serendipity, he says, as much as an instinct for prospecting, knowledge of geology, tenacity and economics. The Independence Range is a perfect example, he says, because it wasn't on geological maps that showed promising "windows" to the Carlin-type zone. A chemical company looking for antimony didn't realize it had discovered gold there until the assays came back.

At the junction of a dirt road we meet Jack Carlson, Forest Service ranger for the district encompassing the Independence Range. Carlson has offered to show us around his district, which has the largest hardrock mining workload of any Forest Service district in the country. In the early 1980s, staking wars broke out here, Carlson says, and now 80 percent of the district is covered by mining claims. Most of the work these days is with Independence Mining Co., a subsidiary of a Luxembourg corporation, which bought up most of the claims.

Independence Mining first came to the Forest Service in 1978 with a proposal to develop a mine that would disturb 700 acres. Carlson says the agency required an environmental impact statement for the mine — a first in Nevada. There was little controversy, Carlson recalls. "The Sierra Club didn't even respond."

Miller looks sheepish. "I got it but didn't know what was going on," he says. That was just after he arrived in Nevada.

"Everything would be in and out, local, all reclaimed," Carlson continues. Not long after, the company proposed more mining, in Burns Basin, Patany Pit, and Mill Canyon, and these were handled under less rigorous environmental assessments. Illustrating how mines can expand incrementally to take over mountains, two open pits and piles of waste rock now sprawl for five miles along the southern end of the Independence Range. And the company plans to double the size of the mine.

As we clear the top of a ridge, the mine comes into view and Burns Basin lies below. It was once a lovely green bowl lined with aspen trees. We can see that because half of it is still there. The other half has been torn apart. An open pit has been gouged into the mountainside across from us. Talus slopes of rubble define the far side of the drainage as it heads down Burns Creek. Exploration roads switchback in horizontal cuts above the mine, moving toward a drill rig.

Conversation ebbs as black-bottomed clouds threaten an early June snowstorm.

It is on mountaintops like this that the industry's pre-eminent right to mine on public land clashes with changing ideas about protecting the natural world. Miners fiercely defend their right to mine on public land, which is enshrined in the 1872 Mining Law. Environmentalists say it is time for agencies to have some discretion to declare certain public lands unsuitable for mining.

Reform bills in Congress take opposite sides. The House bill would allow the secretaries of the Agriculture and Interior departments to declare virtually any area unsuitable if mining would adversely affect other resource values. The Senate bill maintains the status quo, which leaves public lands open to mining unless an area is withdrawn from mineral entries by the secretaries of Interior or Agriculture, the president or Congress.

How would Livermore and Miller settle this dispute? "Mining has to be taken off its pedestal," says Miller, "and put alongside other uses. But who makes the decision? That's the tough one."

Livermore agrees with Miller that agencies should be able to say no to mining in very special places. What about Burns Basin? Livermore hedges. In the late 1940s he recalls hunting deer here — "it was a beautiful area." But he also says his company bid on the mine. "I thought it was an interesting property."

But Miller also hedges on Burns Basin. "I'm not sure I would disallow it now," he says. The Independence Range is beautiful, he says, but not unique. The nearby Ruby Mountains are protected by a wilderness designation, Miller says, and the Toiyabe Mountains of central Nevada would be a higher priority for protection.

Miller quickly adds, however, that his standard for reclamation in the Independence Range would be so high that it would probably make mining prohibitively expensive. Where the scenic values of the landscape are so valuable, Miller says, miners should be required to do "restoration" rather than just "reclamation."

Livermore doesn't argue with this approach. "There have to be stricter controls on special areas," he says. But he worries that "unsuitability" in the House bill could get out of hand. Instead of excluding 5-to-10 percent of Nevada from mining, as Miller predicts could happen, Livermore wonders if 60-to-70 percent of the state might be found unsuitable for mining.

Writers of the House bill, such as staff member Jim Zoia, say the law has to give agencies wide latitude so they can apply their authority in widely varying situations. But both Miller and Livermore worry that broadbrushed discretion can be twisted by different administrations. They would rather see authority exercised closer to the ground through existing land-use plans.

This is where Miller breaks ranks with many other environmentalists. Instead of reviewing each mining proposal to determine suitability — a key to mining reform for most environmentalists — Miller says agency land-use plans should designate sensitive areas for special protection or withdraw them from mining altogether. He points out that federal environmental laws already provide for public involvement in these decisions. "The burden on the public is high," Miller says. "But I'm leery of putting too much power in the regulator's hands."

Livermore says he would prefer to see the decision "taken out of the political arena" by some form of blue-ribbon committee, such as the broad-based resource advisory councils that Interior Secretary Bruce Babbitt has proposed to replace grazing boards.

But Miller is convinced that decisions will always be political and people have to fight for their beliefs. "The public will have to fight for high standards in land-use plans."

As we head back down the mountain through a canyon filled with wildflowers, Carlson offers a cautionary example about political pressure. Independence Mining is drilling in a canyon north of here that is home to a rare plant, the Grimes vetchling, he says, and "some people feel we should avoid the whole area." At the same time the company is the largest taxpayer in Elko County, and more than 150 people showed up at a recent meeting to support the mine's expansion plans.

"People told us we should put more emphasis on local people than on other resources. It would have been suicide to speak out," Carlson says.

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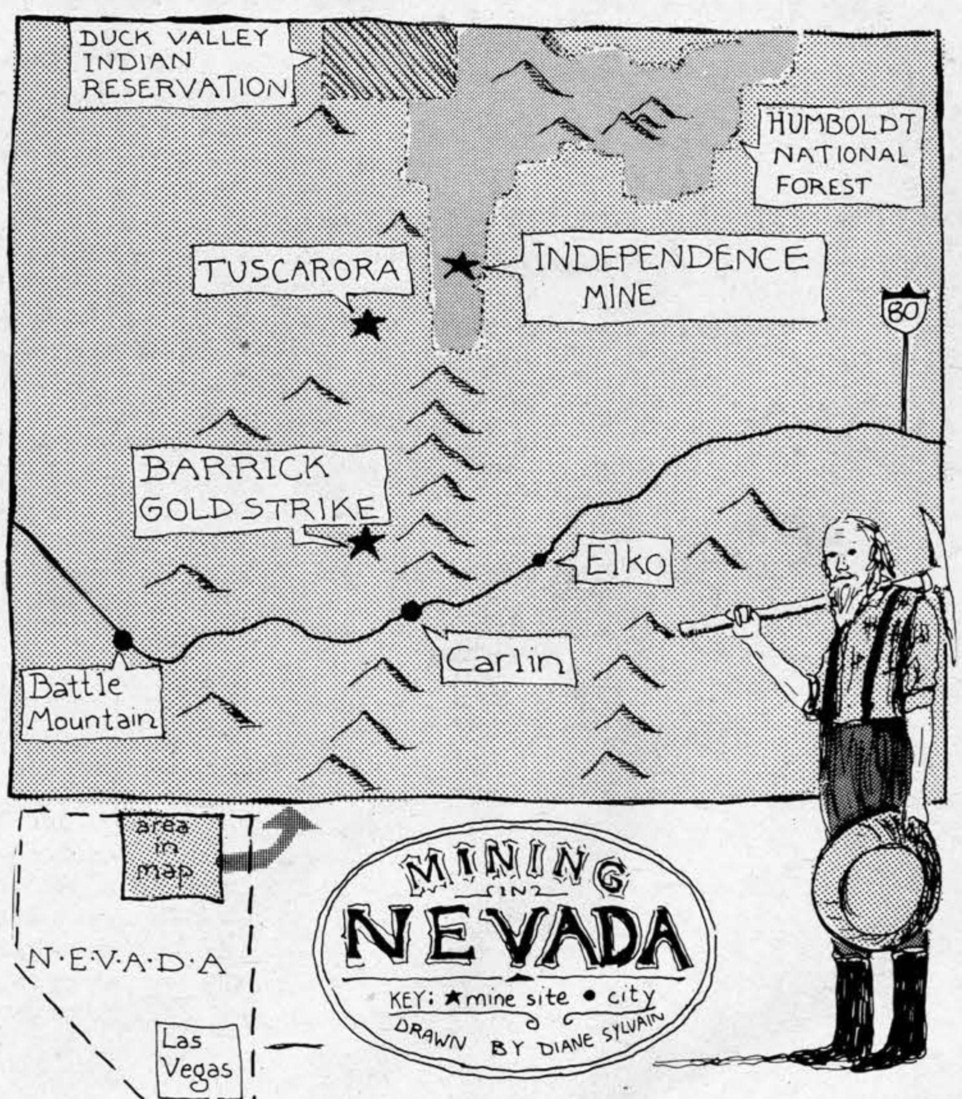

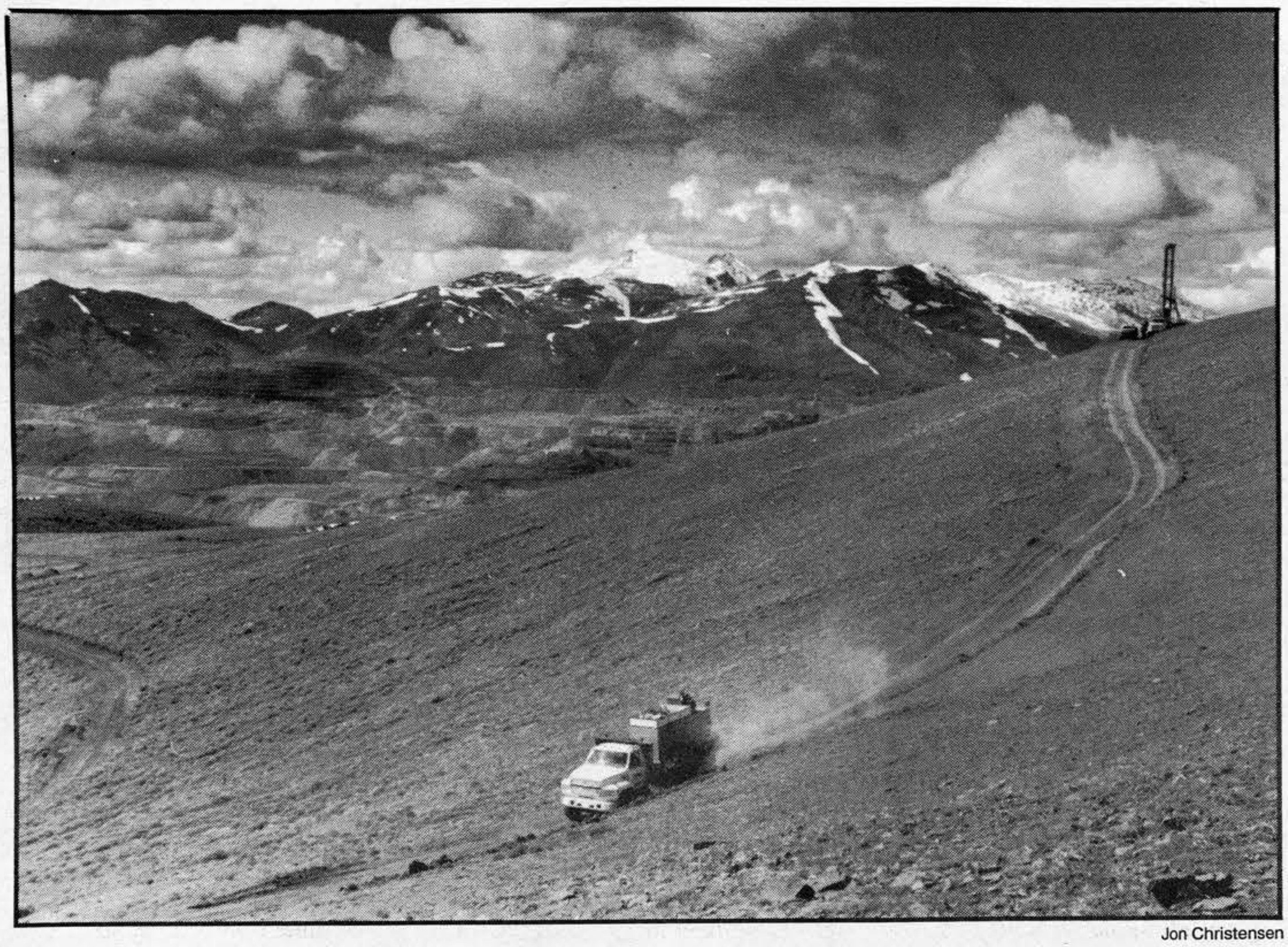

Jon Christensen

A rig drills for gold in the Independence Mountains

Two Nevadans ...

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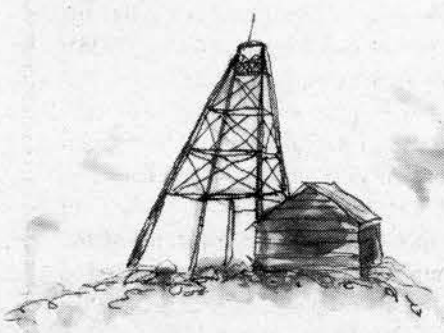

"Mining works for Nevada. If it can't be grown, it has to be mined."

— Bumper sticker in Nevada

Town on the edge

From the top of the mountain, looking down Burns Creek and west across the wide Independence Valley, we could see the historic gold and silver mining town of Tuscarora perched on the distant foothills. During the late 1800s, Tuscarora was home to some 10,000 people. These days the population hovers around a dozen in the winter and 25 in the summer.

We have decided to spend the night in Tuscarora, to see how people live among the ruins of mining. Our guide is Dennis Parks, who runs a pottery school out of an old hotel he has restored. Parks moved his family here in the early 1970s, when Tuscarora was a ghost town. He jokes that the creaky two-story boarding house where we'll stay was a mobile home in the old days, moved from boomtown to boomtown — places with names like Eureka and Cornucopia — before coming to rest in Tuscarora during its heyday.

Mining has come back to Tuscarora twice during this latest gold boom. As we look around town, Livermore explains the recent history. The first time, he says, a small mining company assayed samples of the waste rock piles from the historic mines. Those that "kicked" with enough microscopic gold were piled in a heap and the gold was leached out. It was a relatively small-scale, low-cost and low-impact operation, Livermore says, and probably turned a nice profit.

But the next time mining returned to Tuscarora, an open pit nearly swallowed the town. The Horizon Gold Corp. was after the "halo" of low-grade ore surrounding the played out veins of the glory hole — the principal historic mine shaft — which had filled with water and become a local swimming hole. During the late 1980s, the pit gnawed its way closer and closer to town.

Parks and other residents fought to stop the mine. But Horizon Gold had leased the mineral rights under Tuscarora from the owners of the mining claims patented long ago. The surface titles to the land above were confused, Parks adds, because the plat map of the town site had disappeared.

What saved the town? The price of gold fell below $350 an ounce, Parks explains, "and luckily it was a break-even operation." We walk from the hotel to the edge of the pit in the backyards across the street. Parks says he's not against mining. "I like ambiguities. All my materials in ceramics are mined. But not in my front yard."

For now a ghost-town silence has returned to Tuscarora. "It's so quiet," Miller marvels. "I forgot what it's like."

The pit is slowly filling with water. The swimming hole is becoming a good-sized lake, and a rowboat bobs on the far shore. Horizon Gold keeps a couple of workers around to do reclamation work and close the mine. Parks says one of the mop-up workers told him: "The future of mining in Nevada is reclamation."

Miller says mining isn't necessarily "a big deal if there's good reclamation. If not, it's a long-term problem."

The lake has the forlorn appearance of what it is: a mine, soon to be abandoned. But looking over the water, Livermore says "there could be a destination resort here." He says it with a laugh but he's serious.

"You could make it attractive," Livermore argues. Many environmentalists argue that miners should fill in their pits when they're done. But Livermore says that would usually be too expensive.

"But some pits could end up as an attraction," he says. "You could carve figures and make it an art form. Instead of shunning them as eyesores, maybe people will come look at them. One of our pits is a beautiful illustration, a text book of geology. Some pits could be used as landfills. Some will end up as beautiful lakes."

Miller agrees that "there's lots of room for imaginative solutions. But unless it's planned from the beginning it won't happen, especially with the cost of moving rock."

Both men agree that the local community should have a say in what their post-mining landscape will look like. The community's decisions should be included in a Bureau of Land Management land-use plan for the area, they say, and in cooperative planning between local, state and federal agencies.

Parks points out that most of the people who live in Tuscarora today chose to live in a ghost town. He and others would welcome turning the mine into a state park so that mining would never again occur in the heart of Tuscarora. But the mining company, which is based in Colorado, and the owner of the patented mining claims, who lives in Hawaii, refuse to discuss their plans with residents.

The company, Horizon Gold, has budgeted $75,000 for a reclamation plan that is endorsed by state officials and the BLM. Cleanup workers are trying to take care of the most expensive jobs, rounding off the waste rock dumps and leach pads with a bulldozer, reducing cyanide levels in the leach pads and ponds, and seeding ripped-up areas. The company plans to post a bond of around $10,000 in October to cover reseeding in case this season's planting fails.

Miller is skeptical. "If it doesn't grow, what will they do with $10,000?" Miller says this is the classic problem with mines that wait until the end to reclaim the land. A proper reclamation of the Tuscarora mine would cost close to $1 million, he estimates.

The bottom line of reclamation should be eliminating contamination and restoring the ecosystem, Miller continues, although many of the signs of mining can be left on the landscape. "There's no reason to make this historic district look like the surrounding countryside."

As the sun sets, we walk to the outskirts of town. On the hillside above Tuscarora, cone-shaped piles of yellow and gray crushed rock spill from the mouths of shafts that Livermore says were dug by Chinese workers in the late 19th century.

"Look at all that work," Livermore exclaims. "Those dumps up the hill are from promotional shafts sunk around 1,200 feet or so. That gray stuff is all dead rock. But that's the first thing they would do. It was a promotional thing."

"There was a lot more money invested in 19th century mines than ever came out," Miller says.

"If you did that today you would go bust," Livermore responds. "Like Summitville."

The Summitville disaster last year deprived miners of one of their favorite arguments: that unregulated mines are a thing of the past. The Environmental Protection Agency has been spending some $38,000 a day to stem contamination of a river from a leaking tailings pond at the Colorado mine, abandoned by its bankrupt owner, Galactic Resources (*HCN*,6/14/93).

Both mining reform bills in Congress would establish an abandoned mine reclamation fund to deal with the legacy left behind by busted mining companies. Cleaning up the mistakes of the past is an easy point of agreement for miners and environmentalists, although the bills in Congress disagree on how cleanups would be funded.

A federal fund could help restore Tuscarora if the mining company fails to do the job. But Miller and Livermore agree that Tuscarora is in pretty good shape. They say cleaning up polluted streams and stopping ongoing sources of contamination are much higher priorities.

A symbolic sacrifice area

The next day, on the drive back into Elko, Livermore and Miller talk about the likely legacy of the current gold boom in Nevada. We've scheduled a visit to the Goldstrike mine, one of the largest open pits in the world, smack in the middle of the nearby Carlin trend. The 1 million ounces of gold that Canadian-owned American Barrick Resources Corp. pulled from the Goldstrike mine last year equaled the total U.S. production of gold a decade ago. It all came out of an open pit a mile and half long and a mile wide on public land that Barrick shares with Newmont Mining Co.

Livermore, who is a partner in a nearby mine, calls the Carlin trend a "sacrifice area." When mined it will be the most spectacular hole in the ground, he says, "like the Grand Canyon." It also illustrates, he quickly adds, how the value of gold must be weighed against other resources. Miller acknowledges that gold overwhelms other resource values along the Carlin trend. But the unprecedented bonanza also produces a responsibility, he says, and the means to protect other resources

In the California gold rush more than a century ago, miners made up the rules for mining in the West. "First come, first served" became the basis for the 1872 Mining Law. Ever since, environmental regulation has struggled to keep pace, starting in the 1880s, when the California courts and Legislature forced the first environmental regulations on mining to stop the awesome destruction done by hydraulic mining.

A century later, the Carlin trend is where gold mining has boomed to gigantic scale, with huge impacts to the land and water and unforeseen consequences

continued on next page

Miners get personal with Miller

RENO, Nev. — Mine workers and other angry residents of the busted eastern Nevada town of Ely traveled across the state this summer to lay the blame for their economic woes on the doorstep of one man.

Some 40 people rode a bus chartered by a fledgling chapter of the mining support group People for the West! for the seven-hour trip from Ely to Reno. They were joined by close to 60 more protesters for a noon rally at the University of Nevada, Reno, where Glenn Miller teaches environmental and resource sciences.

Last spring, Miller, on behalf of the Sierra Club, appealed a decision by the Bureau of Land Management approving a massive copper mining project in the historic Robinson mining district just outside Ely. Magma Copper said it would employ 500 construction workers for two years, then add 550 workers for the estimated 16-year life of the mine.

The promise of a new boom seemed to come just in time for Ely, which has gone through boom and bust numerous times since mining began there in 1868. When the last working gold mine in the area shut down last year, 74 workers were laid off and unemployment climbed to 11 percent.

Local BLM officials concluded there would be "no significant impact" from the expansion of three existing open pits on private land and a new tailings impoundment, waste dumps, and pipelines on 1,861 acres of nearby public land. In fact, agency and mine officials said, the operation would reclaim much of the historic disturbance. The BLM's district and state offices approved the Robinson project environmental assessment in March.

That was when the trouble began. The Sierra Club's Nevada Toiyabe Chapter and the Washington, D.C.-based Mineral Policy Center challenged the decision before the Interior Board of Land Appeals. They charged the assessment violated BLM regulations and federal environmental laws. Because the mine will cause more than 640 acres of new disturbance, they demanded a full environmental impact statement.

Nevada Public Lands Alliance poster

The Sierra Club has backed off from appeals that threatened jobs before, Miller said, but this time the BLM went too far. Miller said Phil Hocker of the Mineral Policy Center urged him to "make them follow the law."

In early June, before any hearings could be held on the appeal, the new director of BLM, Jim Baca, concurred with the environmentalists. He directed the Ely district BLM office to prepare an EIS. According to agency officials, the study will delay the project for a year or more.

Miller said that the Sierra Club and Mineral Policy Center agreed to "expedite" the EIS, after negotiating with Magma, the BLM, and after heavy lobbying from state officials, including Nevada Sens. Richard Bryan and Harry Reid. But that was not enough for the people of Ely who brought their protest to Miller's office.

"Ely is dying," said Rich Hasler, a Magma geologist who organized the rally at the University of Nevada. "We're concerned a year to 18 months will kill the town. We're proposing to reclaim one of the biggest eyesores in Nevada and the Sierra Club is stopping it. They're really messing with people's lives."

Miller came by on his lunch break to watch the protest and respond to the charges. "They have a right to bring the war to my personal life, my non-Sierra Club life," he said. "But this has gotten a little personal."

When the protesters realized he was standing nearby, they came over to confront him. "I can't wait for a year," Magma worker Jackie Urbans said. "When I get laid off, I know whose front yard to camp in."

If the BLM had done an EIS, "this project would have been on line now," Miller responded.

"A lot of us don't have jobs," someone in the crowd shouted. "We end up on welfare as you guys go back and forth," said a woman holding an "Ely needs Magma" sign.

"I've never been in a position to stop this," said Miller. "I am in favor of this. It's not going to stop. It is going forward. This is a good project. But what the BLM did was illegal. It's the BLM's fault. And it's Magma's fault."

Miller's willingness to talk seemed to defuse some of the anger. After the rally dispersed, Pat Davison, the California field coordinator for People for the West!, defended the group's decision to bring the protest to Miller's workplace. "I wouldn't say it was confrontational but high profile," she said. "That's the risk local people took in deciding to do this. The preservation community has driven people to a point of desperation."

On the sidelines, Miller talked to Hasler and Eric Seedorff, two organizers of the rally who work for Magma. They apologized to Miller. "I hope it isn't personal," Seedorff said. "We hope to work with you in the future."

—Jon Christensen

Kit Miller

An angry crowd of mine supporters confronts Glenn Miller

Two Nevadans search ...

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for the future.

Last spring, the Barrick Goldstrike mine became a symbol at the center of the mining reform debate when Interior Secretary Bruce Babbitt singled out the Canadian-owned company for trying to gain legal title to the land it is mining. Barrick had completed the next-to-last step toward securing ownership of 1,038 acres of public land under which lies an estimated 20 million ounces of gold.

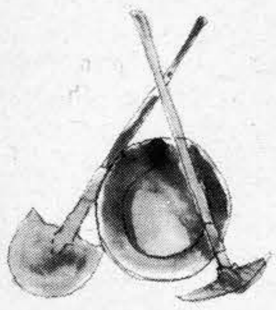
The ore is worth more than $7 billion at current prices. The company faced just one last hurdle: paying a $5 an acre fee to patent the land for a total purchase price of just $5,190.

The move was completely legal under the 1872 Mining Law. But critics such as the Mineral Policy Center, a non-profit group advocating reform, labeled the Barrick patents a "great gold heist" and "government land giveaway."

Babbitt decided to make an example of Barrick, blasting it as a foreign company trying to benefit from a new fast-track patent procedure before reform could be enacted. Because it is on public land, the Goldstrike mine could produce a hefty royalty for the government. But not if the land is privatized. Babbitt yanked the authority of the BLM's state

How to break the impasse over mining reform

opinion by **John Livermore and Glenn Miller**



Livermore calls the Carlin trend a "sacrifice area"

The debate over mining reform is so polarized that even the most accommodating members of the two camps can agree only that change is coming — not what it should be.

Now, two very different mining reform bills are headed for a showdown in a congressional conference committee. The House bill sponsored by Rep. Nick Rahall, D-W.Va., represents the environmental position. The Senate bill sponsored by Sen. Larry Craig, R-Idaho, represents the mining industry.

They could hardly be farther apart. Nevertheless, we believe a sensible solution is still possible.

Although the move to charge a royalty on public-lands mining has attracted the most attention, a more important issue for miners and environmentalists is abolishing surface patents for mining claims, establishing strong environmental regulations and reclamation standards, and outlining the degree of discretion given to land managers to allow or prohibit mining on any given piece of ground.

Both camps have been tantalizingly close to consensus in the past. But participants in those good-faith dialogues represented organizations and companies unwilling to commit to a compromise that might be labeled a sell-out.

Offering up the following proposal, we speak for ourselves. We are simply two Westerners. We think we have incorporated the best features of both bills bound for the conference committee.

FINDINGS AND PURPOSE: Many important new laws begin with findings that state the philosophy and intent that guided Congress and the purpose of the law. For the new mining law these should include preserving incentive by allowing prospectors to search for minerals on public lands that have not been withdrawn from mining; guaranteeing a fair return to the nation for mineral wealth extracted from public lands; and ensuring that environmental values guide mining ventures to protect public resources for future generations.

The Rahall bill has no such section.

The "findings and purpose" section of the Craig bill is essentially a promining platform. It should be rewritten to satisfy backers of the Rahall bill. Although the committee may not be able to write this statement of principles before battling over specific issues, this section of the bill should focus the committee on finding common ground and common values.

EXPLORATION: Both bills aim to ensure free access to open public lands for prospecting if it entails a minimal impact, no road building and immediate reclamation. But after a sampling of surface rocks with a pick and geological maps, drilling is required for serious prospecting. Fortunately, exploratory drilling these days can be done with drill rigs mounted on caterpillar treads, which don't require roads or drill pads. That should be the industry standard for exploration.

In principle, exploration should be encouraged rather than encumbered with regulation. An advance notice with a bond to cover any damages should be sufficient for prospecting activities that do not disturb the land, such as exploratory drilling with track-mounted rigs. Prospecting under notice should be subject to clear environmental proscriptions, such as not damaging riparian areas or building side hill roads. But a permit should be required if land will be disturbed by bulldozing a road, for example. In any case, there should be harsh penalties for violations.

Neither bill quite strikes this balance. It could be done with minimal rewriting of the Rahall bill.

LOCATION OF CLAIMS, FEES AND PATENTS: We believe Title I of the Rahall bill contains essential reforms that in fact are embraced not only by most environmentalists but supported by many miners as well. The Craig bill ignores many of these essential reforms. Foremost is eliminating the surface patent on mining claims under which miners can acquire public lands for $2.50-to-$5 an acre. The Rahall bill offers a good alternative, establishing an annual rental fee of $5-to-$25 an acre. While a mining claim is active, the renter enjoys rights to the surface and minerals underground. With this protection, legitimate miners have no need for a surface patent and the land remains in public ownership after mining.

The Rahall bill also includes due diligence requirements for developing a claim, with a reasonable write-off against the rental fee for some development and restoration work. Rahall also requires standardized 40-acre claims to conform to the legal subdivisions of existing land surveys and eliminate confusing extralateral rights that allow miners to pursue ore veins beyond their claim boundaries. These are good moves to simplify land-management boundaries. This section of the law is where the mining industry can afford to give the most to make a reform compromise work.

DEVELOPMENT OF MINES: Title II of the Rahall bill is where most miners and environmentalists part company. With its detailed list of very strong environmental proscriptions, a strict interpretation of Rahall's bill could practically eliminate all mining in the West. Mining simply cannot be done without some environmental damage.

On the other hand, the Craig bill completely ignores environmental reforms that much of the mining industry is already putting into practice. This could be the toughest, most complicated battle in conference committee. But it doesn't have to be. It's time for the law and the mining industry to catch up to modern environmental concerns.

Compromise is appropriate here. But it must be informed by people who understand the consequences of the language of law. The Rahall bill's blanket prohibitions against damaging riparian areas and adversely affecting groundwater aquifers, for instance, would either stop many major mines entirely or simply be unenforceable. Rahall's environmental and reclamation standards should be simplified to mandate the protection of key public resource values while maintaining the ability of state and federal agencies to write regulations to fit local conditions.

Some of the requirements of Rahall's Title II, which are particularly onerous to the mining industry, are really not necessary because they are already adequately covered by other laws. These include provisions for public hearings on demand and lengthy timetables for permitting and reviews. Rather than setting up a whole new system for public hearings and review of mining proposals, permitting should be reviewed under appropriate state and federal laws, including the National Environmental Policy Act (NEPA) and the Federal Land Policy and Management Act (FLPMA). These laws already work although they certainly need to be made to work better.

The elements of Rahall's Title II that should be preserved include the requirement for a detailed plan of operations after initial exploration and bonding for reclamation should a mining company fail to carry out its responsibility to restore the land. Rahall's general reclamation requirement to restore the land to its previous productivity or better is good. A mined landscape should be left in a state that blends with the surrounding topography and fits office to grant the patent and stopped the process cold. Although Babbitt has acknowledged that Barrick's application is probably too far along to deny, the company is still waiting.

At the Elko airport, we meet John McDonough, the manager of the Goldstrike mine, and Pat Garver, an attorney for Barrick who has been working on mining reform. When I ask about the controversy, Garver says Barrick simply wants to protect its investment and does not oppose paying a royalty. Barrick has been very successful without a patent, Garver acknowledges, and if the company's claim to the minerals could be secured without a patent, that would be acceptable. Barrick also supports a reclamation fee on all mining, he says, whether it occurs on public or private land.

Barrick could probably afford to pay even the 12.5 percent gross royalty advocated by Babbitt earlier this year. But a tax at that level would eat up most if not all of the profit margin at many mines, including those where he is a partner, Livermore says. Although Livermore supports a royalty, he says a tax on net profits would be more equitable.

Miller says he agrees with the approach, but he hesitates to discuss a specific number and distrusts the mining industry's pleas of poverty. Miller says even though Barrick has been unfairly hammered, it is an apt symbol for the issues that are coming to a head in the debate over mining reform.

Before Barrick, no company had ever prepared an environmental impact statement to mine on Bureau of Land Management land in Nevada. The problem, Miller points out, is the sheer magnitude of contemporary mining and the unpredictability of its long-term impacts.

"Here's a company following the law, complying with regulations and having a massive impact. They're doing nothing illegal. It's just a colossal impact," Miller says.

Miller leaves us then for a family reunion, and McDonough accompanies Livermore and me on the 50-mile drive west through the Carlin trend to the Goldstrike mine. There, every hour of the day, trucks haul 190-ton loads of rocks out of an 800-foot-deep pit.

The trucks haul 22,000 tons of rock an hour from the hole. Rock that doesn't have enough gold in it to make it worth processing is dumped on the mesas of waste rock that loom above the pit. Ore-

continued on next page

	CURRENT LAW	HOUSE BILL 322	SENATE BILL 755
1. "Right to mine" vs. "Discretion and Unsuitablity"	Anyone who discovers a valuable mineral deposit on open public lands has a right to mine it. Agencies can regulate but cannot refuse permission.	Gives wide discretion for agencies to declare areas unsuitable for mining. Permit required for most mining activities.	Essentially preserves the right to mine. Miners must gain approval of a plan of operations.
2. Patenting claims	Allows miners to patent or buy land and minerals for \$5 per acre for lode claims and \$2.50 per acre for placer claims.	Prohibits patenting federal land.	Miners pay fair market value to patent land.
3. Reclamation	No federal reclamation law. BLM, Forest Service and most states have regulations that require reclamation and bonds to cover some costs.	Reclamation is required to restore land to previous productivity. Bonding required to cover full cost. Creates abandoned minerals mine reclamation fund funded by rental fees and 50 percent of royalties.	Refers to state reclamation laws but sets no federal standards. Creates abandoned hardrock mine reclamation program. Authorizes federal grants to states not to exceed revenues to U.S. Treasury from mining. But does not specify appropriations.
4. Royalty	No royalty.	8 percent royalty on gross value of minerals taken from public lands.	2 percent royalty on net proceeds from mining on federal lands.
5. Fees	\$35 claim location fee and annual holding fee of \$100 per claim. Exemption for small miner holding 10 or fewer claims with active operating permit who does \$100 worth of "assessment work" per year per claim.	A minimum of \$2.50 per acre annual rental fee gradually rises to \$25 per acre after a claim is held for more than 20 years.	\$25 location fee and \$100 annual holding fee. Holders of fewer than 50 claims can do "assessment" work in lieu of holding fee. Exemption for miners with 10 or fewer claims.
6. Where the money goes	Claim fees and rentals pay for BLM mining law administration costs authorized by Congress; surplus goes to the U.S. Treasury.	Rental fees and 50 percent of royalties go to abandoned mine reclamation fund; 25 percent of royalties paid to states where mines are located and 25 percent to U.S. Treasury.	Two-thirds of claim fees and royalties go to U.S. Treasury, one-third to states in which mines are located.
7. Environmental regulations	No environmental provisions. Other environmental laws apply.	Strong environmental provisions to protect groundwater and to prevent acid mine drainage and other contamination.	Contains no environmental standards. Refers to other existing environmental laws.

future land-use plans.

Reclamation is only a small part of the cost of mining, and it is key to the future of the land. But the details don't need to be written into the mining law. They should be worked out in regulations at the federal and state level and on the ground.

UNSUITABILITY AND DISCRETION: This is the real rub in mining reform. And it will be at the center of the debate. The 1872 Mining Law does not allow the Forest Service or Bureau of Land Management to deny a mining operation, even when strong arguments are presented that mining would destroy important scenic values, wildlife habitat or recreational opportunities.

The mining reform bill should provide some discretion for agencies to limit or prohibit mining in special areas. The mining industry, however, has tagged the Rahall bill a "mine killer" because of the wide latitude it provides for federal land managers to declare virtually any area unsuitable for mining. Rahall also sets up an unrealistic schedule for reviewing all public lands to determine their suitability or unsuitability for mining.

The Craig bill avoids the whole issue.

Fashioning an acceptable compromise on unsuitability and discretion will be very difficult. Although we agree in principle on these issues and on specific areas where mining should or should not be acceptable, we have had a hell of a time agreeing on specific language here.

This is where environmentalists need to recognize the concerns of miners who believe that in some states public pressure will be exerted to remove most of the public land from mining. Miners need to recognize that some places deserve to be protected from mining. In certain very special areas, mining should be excluded. In other areas, mining should be permitted only if the land can be restored to its original condition.

On most public lands, however, mining should be recognized as a valid use, permitted so long as good reclamation is guaranteed.

With public involvement in planning mandated by law, federal land management agencies should be able to decide the highest and best uses for specific tracts of land. But rather than creating a new review and withdrawal procedure especially for mining on public lands, agency discretion should be exercised in the existing land-use planning process. Current law already provides for administrative withdrawals of public lands from mineral entry. Areas of critical environmental concern and research-natural areas can also provide protection by restricting allowable mining activities, although these designations are rarely used for that purpose now.

These withdrawals, protective designations, and other specific restrictions on mining and any other activity can be laid out in the land-use plans prepared by the BLM and Forest Service. But miners need to know before they spend money exploring an area that they will be able to mine if they find ore. If an area is withdrawn after a valid claim has been registered and a plan of operation has been submitted, the miner should be compensated for the lost investment.

ABANDONED MINE RECLAMATION FUND: This is a good idea. Modern mining can help clean up the mistakes of the past. Both bills provide for it. Cleaning up polluted streams should be a top priority. This should be an easy point of agreement for the conference committee. But the fund should be funded, as it is in the Rahall bill, and not simply created to await future appropriations, as it is in the Craig bill.

ROYALTIES: This is where the conference committee can do what it does best: horse-trade. But the royalty should not be bargained against other reforms. A simple compromise is appropriate here. Pick a number between Craig's 2 percent of net profits and Rahall's 8 percent of gross. The tax should be set at a level that raises revenue without putting mines out of business. The most equitable solution might also be the easiest to manage: a 4-to-6 percent proceeds tax, collected through the Internal Revenue Service rather than a new BLM bureaucracy. The state of Nevada has collected such a tax from mines since the Comstock days. The tax could be based on the income calculation the IRS uses for the mineral depletion allowance. The committee could also consider simply reducing this industry write-off.

There has also been talk of imposing a reclamation fee on all hardrock mines, not just those on public lands which would be affected by a royalty. We think this is a good idea. It would spread the burden more fairly among mines on private and public lands and direct the money where it is most needed — to the ground. ■

John Livermore is a geologist, miner and co-founder of Public Resource Associates, a natural resources policy group in Reno, Nev. Glenn Miller is a professor of environmental and resource sciences at the University of Nevada, Reno, who has worked on mining issues for 15 years as a member of several environmental groups. Their opinions do not reflect the positions of their organizations. This essay was written with the help of Jon Christensen, Great Basin regional editor of *High Country News*.

Two Nevadans search ...

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bearing rock is added to stockpiles beside the mill. Inside, a deafening roar continues 24 hours a day as the rock is crushed to the consistency of talcum powder.

Ore from the first 500 feet down in the pit is called oxide ore because it has been oxidized naturally by water percolating into the ground. The gold in this ore bonds readily with cyanide when the finely crushed rock is stirred in giant vats containing cyanide solution.

But Barrick is now mining deeper unoxidized ore also called sulphide or refractory ore. Plumes of steam escape from a building next door, where this ore is baked in ovens 78 feet long. This oxidizes the metals and improves the recovery of gold when the ore is mixed with cyanide. McDonough says that what has taken mother nature millions of years, the autoclaves accomplish in an hour.

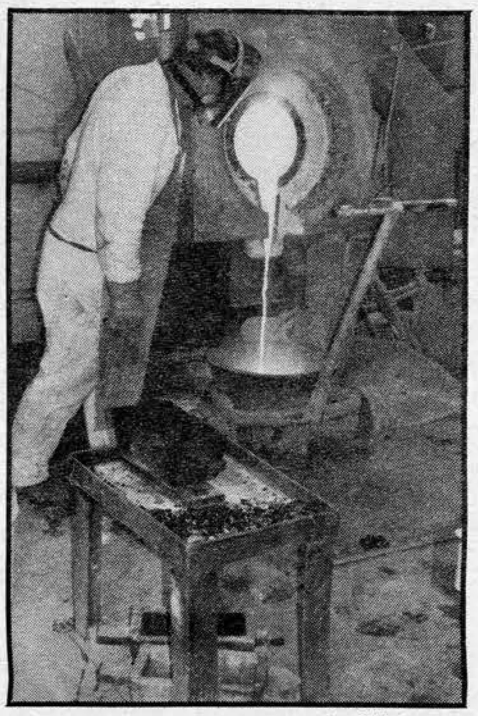
After the ore is mixed with cyanide, carbon in the form of crushed and charred coconut shells is added to the solution. Carbon is even more attractive to gold than the cyanide, which can then be reused. Later, a hot cyanide solution strips the gold from the carbon and the gold in this solution is then attracted to electrically charged steel wool. The steel wool is melted and the molten gold is poured into bars weighing around 50 pounds each. The Goldstrike mine turns out four of these gold bars on an average day and more than 500,000 tons of waste.

Barrick advertises itself as a "growth company." And it is an example of both the economies of scale in modern mining and the seemingly solid value of gold. According to its annual report, the company has been able to sell its gold for more than $400 an ounce through aggressive "hedging" or advance sales, even as the market price has hovered around $350.

In the 1980s, the scale of the current gold boom in Nevada attracted capital from international financial markets eager to diversify their gold holdings from South Africa. A Toronto-based company, with stock held by Canadian, European and American investors, Barrick took over the Goldstrike in 1987, when it was a small heap-leach mine. The company poured money into exploratory drilling that defined an extensive ore body deeper underground. With a new underground mine under construction, the company soon will have more than $1 billion invested here.

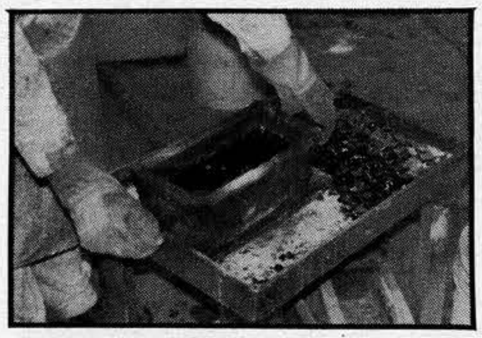
"We still have several years left to find out how much ore we have," McDonough tells us.

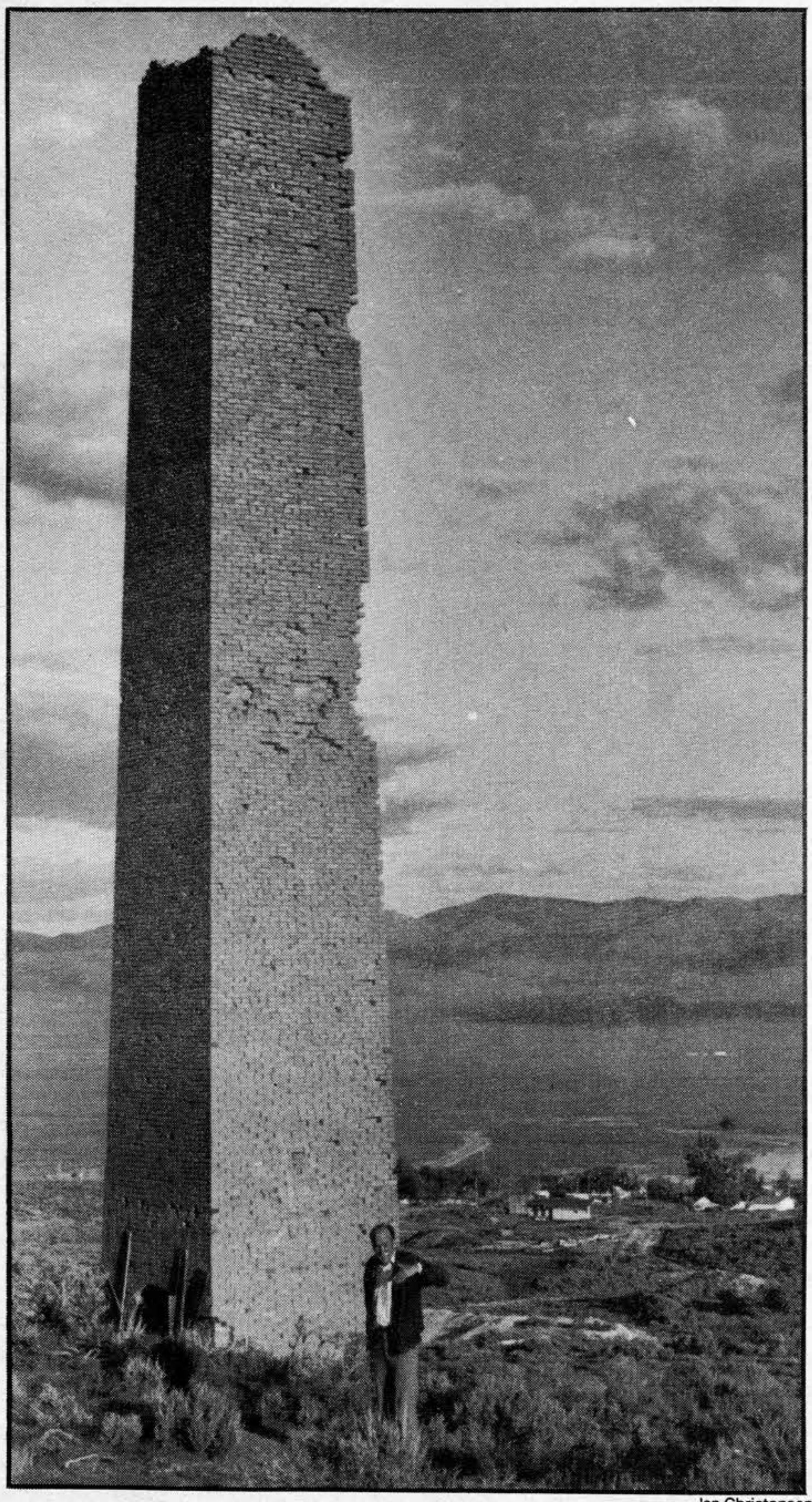
McDonough says the company



Jon Christensen

End of the line: an ingot of gold





Jon Christensen

John Livermore stands by a historic kiln for roasting ore in hills above Tuscarora

Lighthawk patrols mining

After earning their wings in the battles over old-growth forests, the volunteer pilots of Lighthawk, "the environmental air force," are providing air cover for the mining reform movement. This fall, says staff pilot Bruce Gordon, Lighthawk pilots from around the West will be available to fly journalists, activists and politicians over mines to rally support for reform of the 1872 Mining Law. Gordon recently flew one of Lighthawk's single-engine Cessnas from his base in Aspen, Colo., to Reno, Nev., to carry executives of the outdoor recreation industry over nearby mines. Like the clear-cut forests of the Northwest, says Gordon, the huge open-pit mines of the West are often out of the sight from the ground and thus too often out of mind. "You don't realize the magnitude of modern mines until you see a chunk of mountain gone," he says. "People need to see it from the air." Lighthawk will hook up grass-roots groups working for mining reform with local volunteer pilots to provide activists and media with an aerial view of nearby mines. Lighthawk provides the planes and pilots. Passengers are asked to cover the cost of fuel at around $40 to $50 an hour flying time. Contact Bruce Gordon, Lighthawk, 303F AABC, Aspen, CO 81611 (303/925-6987).

The vagaries of Western mine reclamation

From state to state in the West, miners face different requirements to reclaim land, whether private, state or federal, after they've extracted ore. The call for a federal standard is at the heart of efforts to reform the 1872 Mining Law. *A Review of Hardrock Mine Reclamation Practices in Western States*, by Ann Kersten and Susan Lynn, is an updated version of a report originally prepared to help Nevada lawmakers write a state reclamation law in 1989. It is the kind of technical document useful to anyone involved in the issue at any level: from miners seeking a quick review of regulations in different states (Arizona is the laxest state for mining, with no reclamation requirements except on lands leased from the state) to environmentalists pushing for tougher standards at home (check Montana's existing law or New Mexico's new law, adopted after this 89-page report was published). Mining reformers in Congress will also find how states with widely varying private and public lands and different kinds of mineral deposits have, or have not, regulated mining, and what kind of federal reclamation standard would work best, given local realities.

Public Resource Associates, 1755 E. Plumb Lane, Ste. 170, Reno, NV 89502 (702/786-9955). *—J.C.*

plows most of its profits from the Goldstrike into increased production here and at other gold mines in Nevada, Utah and Canada. Last year Barrick's profits climbed to $175 million. The company paid $39 million in income taxes, mainly to the United States, and Barrick investors split a dividend payment of nearly $34 million at 6 1/2 cents a share. But the main attraction for investors is not the company's annual dividend but its stock value, which has risen steadily with announcements of new reserves and added mining capacity at the Goldstrike.

The Goldstrike mine is an accounting feat as well as an engineering marvel. Barrick has $100 million invested in rolling stock, with each tire for its 190-ton trucks costing $15,000. McDonough says the trucks burn $150 an hour in diesel fuel on the six-mile haul spiraling up from the bottom of the pit. Although the drivers are among the highest paid workers in Nevada, their labor at $15-to-$20 an hour represents just a fraction of the cost of running equipment. Every piece of machinery and every ton of ore at the Goldstrike is tracked by a remote control computer system.

"The objective is to keep everything moving," says McDonough. The firm mines as fast as it can because, whether it mines fast or slow, it must pump out the same amount of groundwater. The mine has 30 wells around the pit, each of which cost roughly $500,000 to dig, and they pump 65,000 gallons of water a minute to keep the pit from flooding. Pumping has lowered the aquifer around the pit by almost 1,200 feet.

With the rate of pumping at the mine double what the company predicted in its environmental impact statements, everyone has had to play catch-up, McDonough acknowledges, including Barrick, state regulators, the BLM and environmentalists. Where the pit is now, Barrick and Newmont plan to leave a recreational lake.

I ask some of Miller's questions about this lake-to-be: How long will it take for the aquifer to recover and the pit to fill with water? It will start filling fast, McDonough says, but could take up to 100 years to come all the way up. Will the pit walls slough and oxidize, producing acids? Barrick's geologists and engineers don't think so; they believe fish will live in the lake.

As we drive back to Elko through a thundershower, Livermore and McDonough talk about what the mining boom has meant. In 10 years the population has doubled to more than 20,000. A third of the adults work for mining companies, and the $38,000 average annual income in Elko is the highest in Nevada.

Barrick has put about $1 million a year into Elko, McDonough says, building 375 homes, 150 apartments and buying 108 mobile homes that have mostly been sold or rented to employees. McDonough says Barrick helped pay to expand the town's water and sewer systems, schools and a community college. It pays for continuing education for employees and gives a $3,000 a year scholarship to each college-bound child of an employee — more if they will study chemical engineering or minerals.

What will happen to Elko when the boom goes bust?

McDonough says Elko has "15-to-20 years to figure out what to do next. We're just beginning to talk of post-mining. It's still up for grabs. Whether Elko will still be 20,000 people in 20 years — it's hard to say ... What's the future of any place with a smokestack?"

Relative values

Livermore and Miller pore over the mining reform bills throughout the summer, and we continue to talk. "I sometimes wonder, how important it is for our society to mine gold," Miller muses on one occasion. "What are the public values that are gained or lost? On the Carlin trend one can argue that the gold is worth more than the other resource values. Gold overwhelms the value of the land under any economic scenario. On the other hand, people a hundred years from now will pay more of the unknown costs.

"We are making permanent decisions," Miller says. "The land will never be the same."

But mining can never be sustainable by any definition, since ore bodies play out. Miller says this leads him to take a more moderate stance.

"Jobs and mineral production are real issues. One has to sign on to mining at least a little in a society that uses the things that mining produces," Miller points out. "A reasonable person will say some mining and disturbance is appropriate. In any modern society you have to accept some level of change. You hope your efforts can be used most successfully to make sure it doesn't have unacceptable impacts for future generations."

"Gold is a funny thing," Livermore says. "Nobody can predict what will happen to gold. But there will always be a demand. It's emotional, primal.

"Mining is not going to stop," he adds. "Nevada is so rich. It's the richest state in the country in minerals. These hills are loaded with minerals. It's just unbelievable. Look at a map of the mining districts of Nevada. The whole state is one blotch after another."

Although they come at mining from different points of view, Livermore and Miller agree on the basics of mining reform: an end to patenting of public land while providing security of tenure for mining companies while they mine; an equitable return to the public on minerals mined from public lands; strict environmental regulation of mining that doesn't discourage exploration; and protection for special places through land-use planning. And they predict that where they come together is probably very close to the compromise that a Congressional conference committee will have to consider. But they worry about horse-trading in Congress.

Livermore's nightmare is that the worst features of both bills will be combined. Miller says it's too bad some of the discussion won't take place in Nevada.

"Nobody is dealing with anybody outside of Washington," Miller agrees. "When it gets this narrow, people negotiating don't want anybody else involved."

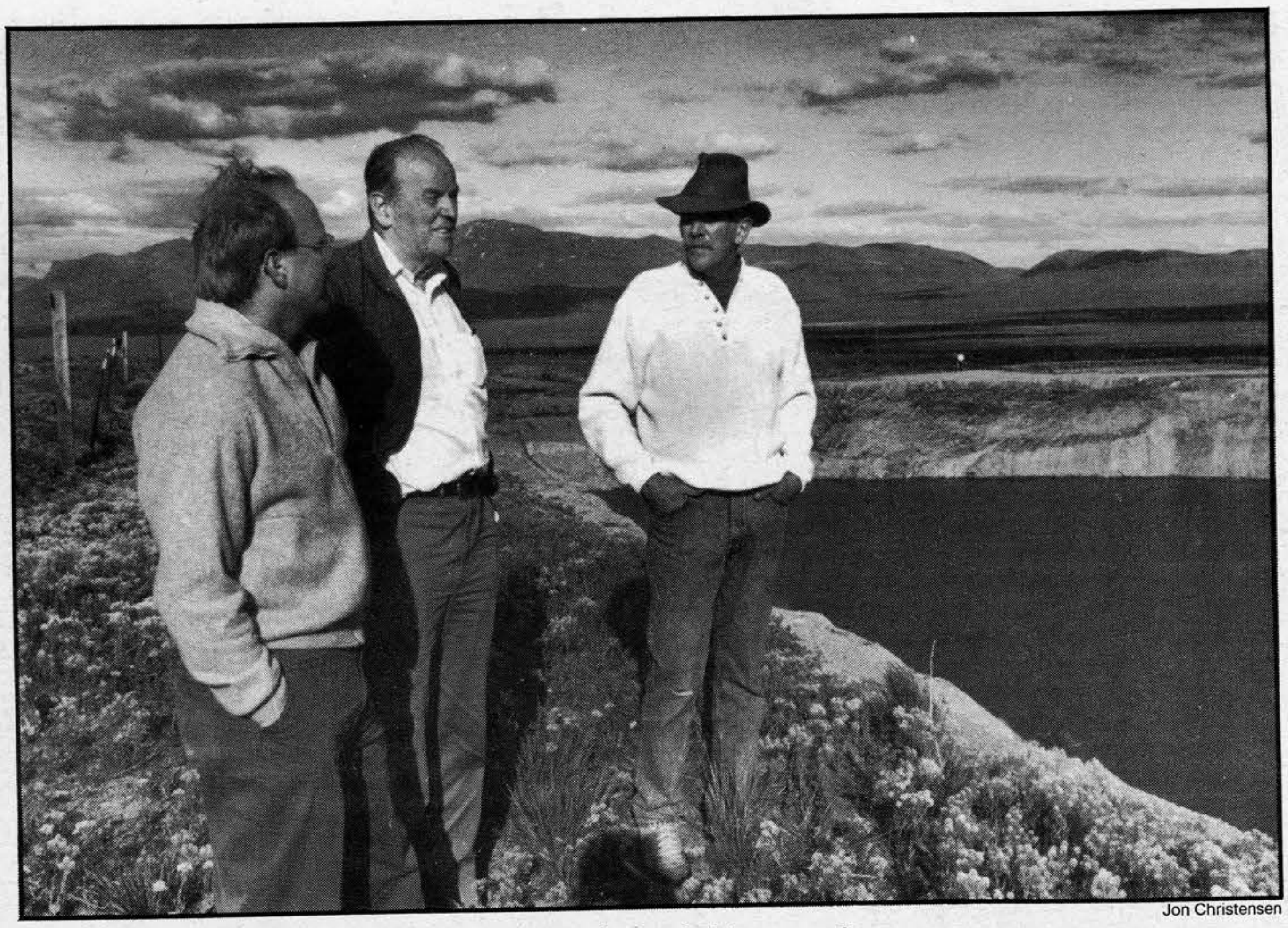
Miller says he will go back to testify if he is invited to any hearings on mining reform. Livermore plans a trip to Washington to talk to industry people and staff on Capitol Hill.

"One thing about a discovery," Livermore reflects, "you've got something concrete. With public policy it's different. You might get a victory. But it's so amorphous. I've always felt what is important is a good mining law. The trouble is both sides feel they have to gain something. So you have to battle your way toward the center."

Miller points out that "the mining industry never wanted to talk when they were in the driver's seat. But this year it's the environmental community that's not terribly interested in talking to the mining industry. Politically, we're on a roll. Now the longer industry waits, the harder it will be for them."

In an ideal world, miners and environmentalists and agencies would work harmoniously under a good law, Miller says. In the real world, Miller says, "mining will take eternal vigilance no matter how things are going. Without constant public involvement, reform will be worthless." ■

Jon Christensen is Great Basin editor of *High Country News*. His stories were paid for by the High Country News Research Fund.



Jon Christensen

Glenn Miller, John Livermore and Dennis Parks stand near the Tuscarora pit

The public process

No public hearings are planned on mining reform during the 103rd Congress, which runs through next year. The Senate passed a mining reform bill, S. 775, earlier this year. The House Natural Resources Committee is expected to mark up Rep. Rahall's bill, H.R. 322, sometime in October. If that bill passes a full House vote, a congressional conference committee will try to negotiate a compromise.

Members of the conference committee will be selected by Sen. J. Bennett Johnston, D-La., chairman of the Senate Energy and Natural Resources Committee, and by Rep. George Miller, D-Calif., chairman of the House Natural Resources Committee. The conference committee could meet well into next year before issuing a "conference report" to be voted on in an up-or-down vote with no amendments by the full House and Senate.

At this point and throughout this process, the best way to express an opinion on mining reform is to contact your representative and senators. Comments will be especially useful, congressional staffers say, if the provisions of the bills are specifically addressed.

For copies of the bills, contact Candice Brown, Subcommittee on Energy and Mineral Resources, House of Representatives, Washington, D.C. 20515 (202/225-8331).

For information about the positions that environmental groups and industry are taking on mining reform, contact the following groups:

Mineral Policy Center, 1325 Massachusetts Ave. NW, Room 550, Washington, D.C. 20005 (202/737-1872). Stewart Udall is chairman and Philip Hocker is president of the center, which has been at the forefront of a coalition of environmental groups advocating reform and backing the Rahall bill.

American Mining Congress, 1920 N Street NW, Washington, D.C. 20036 (202/861-2800). This national trade association is an advocate for industry and backs the Craig bill.

—J.C.

LETTERS

BABBITT IS NO WATT

Dear *HCN*,

Your essay by Jeffrey St. Clair (*HCN*, 9/6/93), titled "Babbitt is no Stegner or Abbey," calls for a response, even if a mild one from a voice of the past.

First, Babbitt comes off double damned. Under him the "Endangered Species Act will be altered more drastically ... etc." I'm not aware that the Secretary of Interior has a vote in shaping legislation. Elected congresspersons will be responsible for such alterations, if they take place.

Second, Babbitt is not once, but twice, likened unto his predecessors James Watt and Manuel Lujan. Yet in a few months in office Bruce Babbitt put in place a doubling of grazing fees (over the next few years) on the public grazing lands of the West.

To be called "a political descendant of Frank Church and Mo Udall" is to me a historical tribute; to fall short of being another Stegner or Abbey may be a valid observation.

But to liken Babbitt to Watt and Lujan is to commit an obscenity.

Teno Roncalio
Cheyenne, Wyoming

OVERPOPULATION UNDERLIES MANY ISSUES

Dear *HCN*,

Kudos to writer Peter Shelton (*HCN*, 8/23/93). He said, "Overuse and overpoopulation. Especially in the arid West ..."

Some say that population growth is not a problem in the wide open spaces of the West, but as his essay points out, even remote places like Ridgway, Colo., can feel the pressure. Right above Shelton's essay was another article about overpopulation, although it didn't say so in so many words: Miles Corwin's report about the mass exodus from California. He talks about crime, high housing prices, smog, gridlocked freeways, all indicators of overpopulation. Ironically, as Californians flee these problems, they export them. As Lindsey Grant, author of *Elephants in a Volkswagen*, said, "Everybody says 'not in my back yard,' but they have to realize that population is growing everywhere else, too."

Kathleene Parker
White Rock, New Mexico

WE'VE SEEN THIS WESTERN BEFORE

Dear *HCN*,

It is increasingly distressing to read essays, such as the one offered by Jim Stiles, which announce the imminent death of the 'real' West, killed in Mr. Stiles' case not by cows but by hordes of tourists on mountain bikes (*HCN*, 8/23/93). The cry of mourning for the passing of the 'true' West has become less a lament than a bellyache. I would like to refer Mr. Stiles, et al, to an article by Alvin Josephy titled *Whose Old West Is Disappearing?* The author notes that every Western generation since the 1820s has lamented the passing of the 'one true West': the mountain men decried the arrival of the immigrants, the settlers lamented the arrival of the automobile and those boorish tourists, and so on.

Josephy opens his article by quoting the great artist Frederic Remington, who said: "I knew the wild rivers and the vacant land were about to vanish forever." That was in 1905!

J.C. White
Santa Fe, New Mexico

CRIMES AGAINST HUMANITY

Dear *HCN*,

Reading Carole Gallagher's stunning work, *American Ground Zero: The Secret Nuclear War* (*HCN*, 9/6/93), is a sobering experience, and we are all indebted to her. Her discovery in a once-secret Atomic Energy Commission document that people living downwind of the Nevada test site were officially seen as a "low use segment of the population" reflects the arrogance of the scientists and technicians who have designed, conducted and organized the nuclear weapons program from their bases at Los Alamos, Lawrence Livermore and Oak Ridge for the last 50 years. They seem to regard the life and functioning of the entire planet as their rightful guinea pig and operate under a code of secrecy and silence that even the Mafia must envy.

Philip Fradkin's book, *Fallout: An American Nuclear Tragedy*, is excellent companion reading for Gallagher's book, as its major focus is the long and unsuccessful effort of a few of the downwinders to seek legal redress. Like Gallagher, he found his subject matter made his book difficult to write, research and get published. Reading these books and seeing the faces from her stunning photographs, it is easy to share her feelings of another Holocaust. If this were a just nation, trial based on the Nuremberg principle of crimes against humanity would be convened, and the defendants would be the nuclear weapons scientists, technicians and administrators.

Chester McQueary
Parachute, Colorado

HUNTER WAS AN ARMED ROBBER

Dear *HCN*,

Your report Sept. 6 on so-called hunters Donald Lewis and Art Sims ("Poacher shoots elk, video and himself") was enough to anger anyone with even a passing interest in the outdoors. Unfortunately, slime like this is showing up in the West at an alarming rate. Recently we have seen the gunning down of tame deer, peregrine falcons and swans in our immediate area.

Lewis' crime should have been described differently: It was armed robbery, destruction of public property, and grand theft. His punishment was less than a kid would get for sticking up a 7-11 store with a Saturday night special and making off with a six-pack. Based on his position in the hunting community as a role model and his (theirs, include Sims in this also) obvious knowledge of what they were doing, a sentence of 10-20 years in federal prison seems more appropriate.

M.A. Wilke
Boise, Idaho

WHO CARES ABOUT COWS?

Dear *HCN*,

Some livestock producers seem to believe that anti-cow advocates such as myself see wolf reintroduction as a means of eliminating livestock from the Greater Yellowstone Ecosystem public lands. While I am a strong proponent of biological pest control, wolves just don't eat enough livestock to provide effective regulation of the livestock scourge that plagues the West.

A study of wolf predation on livestock in Alberta has shown that 1,500 wolves only managed to kill an average of 76 cows and 149 calves per year. That works out to only .089 percent of all available livestock in that study area. That would hardly make a dent in the 300,000 cows that graze the public lands in the greater Yellowstone ecosystem.

While anti-cow proponents are searching for a more effective control mechanism, one has to question why we are spending so much money trying to protect domestic animals from predators. After all, cows aren't an endangered species. There are 105 million of them in the United States alone. Texas has over 1.3 million. So why are we worrying about the loss of a few cows that may occur in Greater Yellowstone?

George Wuerthner
Livingston, Montana