

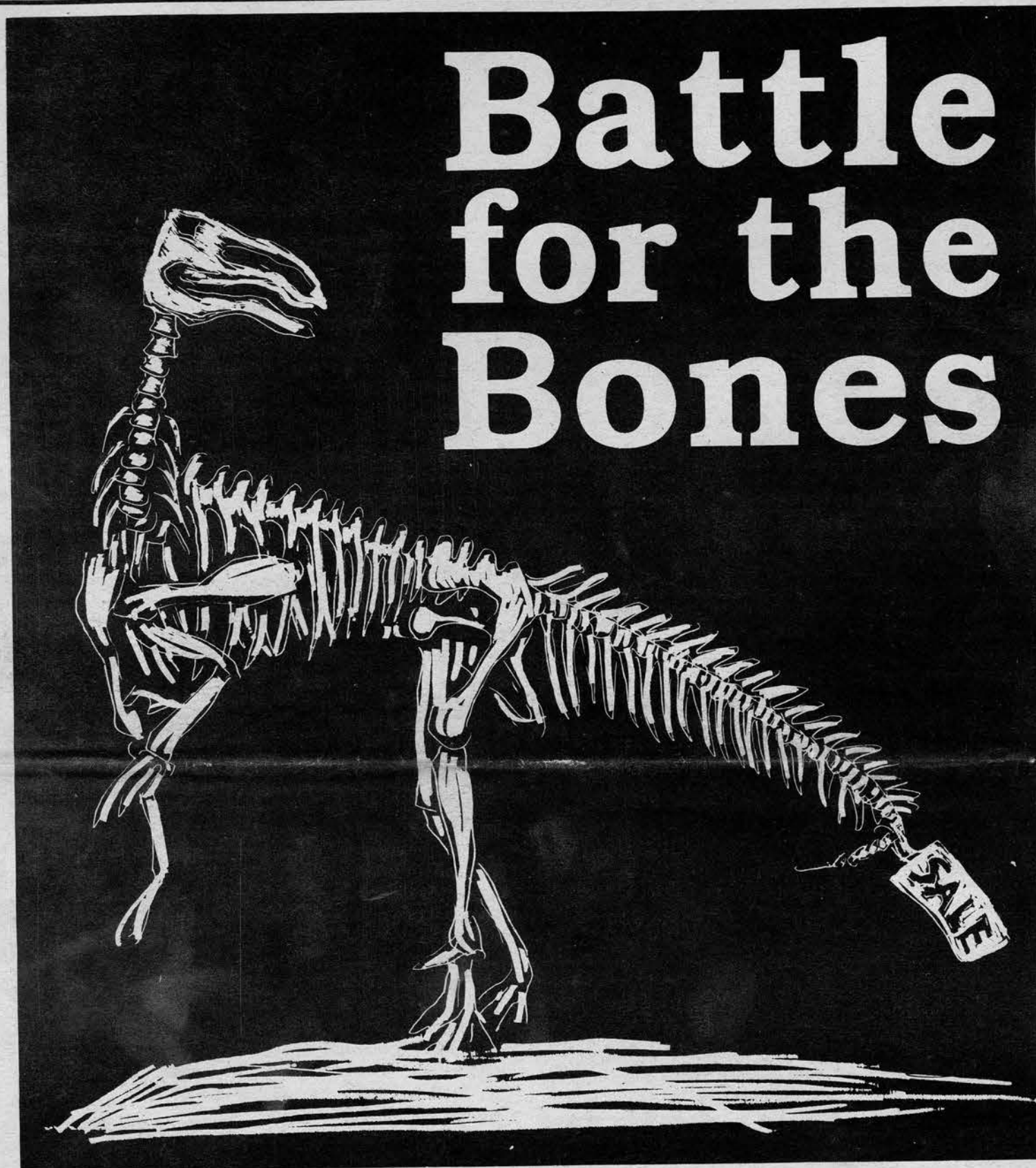
High Country News

September 21, 1992

Vol. 24 No. 17

A Paper for People who Care about the West

One dollar



Diane Sylvain

by Michael Milstein



RAPID CITY, S.D. — Back 100 million years or so ago, vast herds of plant-eating dinosaurs roamed the American West, much as bison did more recently. Perhaps predators such as allosaurs and voracious raptors followed along to feed on vulnerable prey. They were the wildlife of the Mesozoic.

Today, across the West, scientists, rockhounds and those who collect the remains of such creatures for profit are battling over the bones of both prey and predator.

It's largely a matter of values.

Scholars who study fossils say their value has nothing to do with money; it lies in what they reveal about past life. But those among the growing ranks of commercial fossil collectors say anyone

should be able to own a piece of the past.

In the middle are the remains of the West's dinosaurs, some of the biggest and most successful animals that have ever walked the earth. Now their bones are falling prey to the auction block.

"Staggering prices commercial collectors are receiving for remains" may make fossils the focus of "the last American gold rush," warns Pat Leiggi, a Montana State University paleontologist. He is leading a campaign for a federal bill to outlaw any digging for profit on federal lands. That bill was introduced in July by Sen. Max Baucus, D-Mont. Public lands in the West are where most dinosaur bones are found.

"If we continue to allow these public resources to be sold to the highest bidder, we stand to lose crucial sources of scientific research and public education," Baucus told his fellow senators.

Nonsense, say the collectors and dealers, as well as a separate faction of academics. They contend commercial collectors are only bringing free enter-

prise to a scientific arena. They want to be allowed to extract ancient remains from public lands under permit, just like mining or oil companies remove other precious resources. They also contend that they serve a purpose, by finding more fossils and making ancient skeletons more widely available to scientists and the public.

"If nobody is out looking for these things, they just erode into nothing," says Barry James, a paleontologist and owner of Prehistoric Journeys in Santa Barbara, Calif. The firm sells fossils to the public.

Those who would shut down fossil businesses are elitists, James argues, afraid of challenges and eager to keep bones locked in musty cellars.

"You could go to any museum in the country and they would have probably hundreds of specimens in their basement that nobody ever gets to see," says James. "We let people have some of these things for their own living room. Kids are thrilled to be able to buy a

dinosaur tooth."

During an August federal conference on fossil management in Rapid City, S.D., tempers sometimes flared. Hugh Genoways, director of the Nebraska State Museum, reported that a \$15,000 study revealed that of 40 public-land fossil sites surveyed, about one-quarter had been vandalized. He suggested that the destruction could be driven by commercialization.

"Don't you think it would have been better to spend that money finding fossils than looking for holes where fossils might have been?" questioned Peter Larson, president of the Black Hills Institute of Geological Research. Based just down the road from Mt. Rushmore, the Black Hills Institute is one of the nation's largest and most successful fossil dealerships.

Larson's firm is also controversial. In May, FBI agents and National Guard members converged on the company's buildings in tiny Hill City and seized

continued on page 10

Dear friends,

A recycling test

The words you are reading are printed on a new, recycled stock we are testing. To be precise, the outside and center sheets are made of 34-pound newsprint produced by Smurfit Newsprint Corp. in Oregon City, Ore. It is not quite as heavy as our first recycled stock, nor as white. This stock rates 65 on the brightness scale while the Eco-offset we printed on until March 23, 1992, was a very bright 78. Regular newsprint comes in around 58 and the Mandobrite stock on which the rest of this issue is printed is 72 bright.

The Smurfit newsprint is made from 75 percent post-consumer waste — used magazines and newspapers. This compares to only 9 percent post-consumer content in Eco-offset, with another 45 percent from pre-consumer, de-inked products. The bleaching agent used to produce the Smurfit paper is relatively benign: sodium hydro-sulphite with titanium dioxide added to increase the brightness. No elemental chlorine, which generates harmful dioxins, is used in the process.

The other benefit of this stock is its price: 45 percent less than the Eco-offset and even slightly less than the non-recycled Mandobrite the rest of this issue is printed on. The trade-off, however, is the feel and whiteness, the durability (non-yellowing) over time, and the clarity of photos and other graphics. We ordered one test roll of this paper to see how it performs. Our thanks to Alan Davis, president of Conservatree Paper Company, for his assistance with the search.

The next issue will also contain a mixture of recycled and non-recycled stock. Your reaction will help us decide whether to continue to use this paper.

Enter Fall

Fall weather swept through western Colorado early this month; by Sept. 8 some aspen leaves had turned from green to yellow to fallen-on-the-ground. Long-time residents predict an early winter — and a hard one.

Reaction to our Sept. 7 lead story about a subdivision going up in a wilderness roused some readers. We expected more reaction than usual, since we mailed the paper to several thousand postal customers in the towns nearest the West Elk Wilderness. A half-dozen people subscribed, and other positive response came from eighth grade teacher Al Williams, in Paonia. His class engaged in spirited debate over the wilderness issue, he reported.

But one caller questioned our choice of mountain goat on the masthead. When told the goat was chosen some 20 years ago because it seemed an animal both

humorous and wise, the woman said: "I'm sure you know the *real* reason." We confess we don't know any real reason, but guess it has something to do with religion.

New intern

New intern Zaz Hollander comes to Paonia from Bend, Ore., by way of Zion and Arches national parks, plus every rest area on one, breathtaking 20-mile stretch of Interstate 70 through Utah.

A 1990 graduate of the University of Oregon, Zaz worked with the university's Survival Center in Eugene. She also volunteered with other local groups such as the Oregon Rivers Council and the Association of Forest Service Employees for Environmental Ethics.

After college, Zaz tried to break into free-lance journalism while simultaneously paying the rent. Eventually she hopes to learn to do both.

Originally from Hopewell, N.J., a small town near Princeton, this is her first time in Colorado, though Utah's canyon country had become a second home during the last few years.

Visitors

Tom Bartels of Durango, Colo., Video Productions stopped in, as did Sarah Peapples and Bob Troup. Bob helped produce the popular public-radio show called E-Town.

Sarah Seyfried of New York came in to say the *Colorado Handbook*, which we reviewed recently, lured her to Paonia and the HCN office. She's a photo representative in the fashion business. That same day Clem and Mary Jo Verstraete of Osceola, Ind., came in say they'd just read the *Handbook*, too, and were following its suggestions.

From Ithaca, N.Y., came Duane and Barbara Wilcox, and from Grand Junction, Colo., came Tim Hartzell, new district manager for the Bureau of Land Management. Californian Richard Chiaramonte, whose last name means clear mountain in Italian, came through as he

searched for a good place to permanently land; he's a former teacher. Current teachers John Staniloiu and Dena Evans stopped in for a break during their 25-day tour with 12 students from a private school in Missouri.

Computer jockey Todd Greenhalgh from Laramie, Wyo., chatted a while as did Loren Kinczel, a high school student from Piedmont, Calif. Loren is a student of former intern Matt Klinge. Ross Freeman, who works periodically for the Canyonlands Field Institute in Moab, Utah, took a break from a tour of the Colorado Plateau to visit the HCN office.

It does not seem sufficient to say that Chris Harris and Bob Burton "dropped by" the HCN office, since the two are from Australia and the "dropping by" was more than casual.

They are associated with the Wilder-



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Ed Marston

New intern Zaz Hollander and Nixon, her pet rat

ness Society of Australia, and are wandering the globe seeking information on non-profits and exploring links between environmental problems in Australia and everywhere else.

Bob said they dread only one thing: Going home. "Everywhere we stopped, we collected information and shipped it home. When we get back, it will be waiting for us."

—Betsy Marston for the staff

LETTERS

MCCLUSKEY'S APPROACH WAS DIFFERENT

Dear HCN,

This office of attorneys represents and has represented William H. McCluskey concerning his Colorado real estate interests for many years and did so when William H. McCluskey sold the property he owned along the Gunnison River to the County of Delta and Colorado Open Lands, a non-profit corporation.

I wish to advise you and your readers of the correct information concerning that sale, in hopes of lessening any damages that might result to the McCluskey land values from errors in your article.

First, Mr. McCluskey donated \$110,000 of the purchase price so that the transaction could be completed because

he felt the Gunnison River frontage property should be open to the public.

Second, the ranch property was leased by LeValley Ranches of Hotchkiss, Colorado, and was well cared for and used as a working ranch, as it still is to this date.

Thirdly, after Mr. Chapman restricted access on the McCluskey private property, Mr. McCluskey made a new agreement with Mr. Chapman because he was not pleased with that approach and Mr. Chapman no longer marketed the property. Instead, this office and Mr. McCluskey negotiated the sale. The use of the Gunnison River for fishing and recreation was made accessible across the McCluskey property. Further, Mr. McCluskey agreed to finance a large amount of the purchase price and also agreed not to require a lien on the river frontage property.

Finally, when the debt due and owing to Mr. McCluskey for the balance of the purchase price was not paid, Mr. McCluskey accepted the return of ownership to him, in lieu of foreclosure, of the property sold except the river frontage property. Mr. McCluskey let the public keep and enjoy the river frontage property for access to the "Gold Medal Fishery."

We make no other comments concerning the focus of the article on Mr. Chapman's tactics and his activities in the West Elk Wilderness, but felt that Mr. McCluskey, his family and his properties should not be besmirched by errors and innuendos reported in the article concerning his limited relationship with Mr. Chapman.

James R. Briscoe
Hotchkiss, Colorado

WESTERN ROUNDUP

Developer halts his subdivision in a wilderness

Developer Tom Chapman pulled his workers and helicopters out of the West Elk Wilderness last week, after Colorado Sen. Hank Brown asked the Forest Service to renew negotiations with Chapman.

"The West Elk is an extremely beautiful wilderness area and it would be tragic to put a development in the middle of it," Brown said. "It was at least worth the offer to try again."

Brown, a Republican, wrote to Chapman, also a Republican, promising to help set up negotiations for a land trade if Chapman would stop construction of a two-story log cabin he is building on a 160-acre inholding in the West Elks. Chapman agreed.

The cabin, which Chapman says is almost 20 percent complete, is the first of six luxury homes Chapman's West Elk Development Corp. plans to build in the western Colorado wilderness area. Previously, Chapman had been adamant that the land was "not for sale at any price." (HCN, 9/7/92). He now says a land exchange with the Forest Service would be the "best-case scenario."

"I admit that I don't want to have to build a house in the wilderness," said Chapman, "but I think it's ludicrous for the Forest Service and private landowners to be caught in this kind of conflict."

Chapman says he already knows of Forest Service property he would consider in trade. But given the failure of past negotiations, Chapman says this time he will only meet with senior level Forest Service staff — specifically Elizabeth Estill, the newly appointed head of the Forest Service's Rocky Mountain regional office, and Robert Storch, supervisor of the Gunnison National Forest, which oversees the West Elk Wilderness.

Chapman also warned that he will only wait a few months. "If we can't find some kind of resolution by the end of the year, we are going to proceed with this thing."

The Forest Service's Estill says the agency will be glad to meet with Chapman. But she also says, "The Forest Service can only agree to pay (or trade) for fair market value."

Paul Zimmerman, who heads the land purchase and exchange group for the regional office, says that in order for negotiations to occur, Chapman must agree to an appraisal by an independent contractor. Once a price is set, Zimmerman says, both parties can look for land of comparable value for trade.

"The problem we expect to have — and have already experienced — is reach-



Steve Hinchman/Lighthawk

The initial framework of Tom Chapman's \$800,000 log cabin going up in the West Elk Wilderness

ing an agreement on fair market value," says Zimmerman, who has spent four years negotiating with Chapman and previous owners.

In 1989, Chapman served as broker to Robert Minerich, who bought the 160 acres and a nearby 80-acre parcel for \$240,000, or \$1,000 an acre. Minerich and Chapman then said they would build on the land or sell it unless the Forest Service bought the land for \$5,500 an acre. Another possibility, they said, was trading it for land near the Telluride or Aspen ski areas worth about \$1 million.

Forest Service officials said the land was only worth the \$1,000 an acre that Minerich paid originally. The agency's counter offer, to consolidate the two parcels into a single 240-acre block on the edge of the West Elk Wilderness, was rejected by Minerich.

After that, Chapman says, the Forest Service dropped the ball. "Viable proposals were put on the table and summarily dismissed by the Forest Service without further negotiations, nor counter proposals. That's the reason I gave up on the Forest Service."

In July 1992, Chapman and four investors formed the West Elk Develop-

ment Corp. and bought the land for \$960,000. He says the agency now has no choice but to meet his price or let him develop the land.

"I have paid a third of a million dollars cash down and I am on a legal note for \$660,000," Chapman says angrily. "If (the Forest Service) chooses to appraise my lands below \$960,000 then I can't do it. There won't be a trade."

"We are perfectly willing to live with the investment we made up there because we know we can build all the homes and make a profit."

Chapman also warns that the failure of the Forest Service to act on his and other wilderness inholdings has put not just the West Elk, but the country's entire wilderness system at risk.

"Of course it won't stop (with the West Elk)," Chapman wrote in a recent letter to the Colorado press. "All the other wilderness areas that have inholdings will need to be 'undesignated' as well. For surely other inholders will be following in our footsteps. We could declassify millions of acres of wilderness."

Some question Chapman's figures. Jon Mulford of the Wilderness Lands Trust in Boulder, Colo., a private group that buys wilderness inholdings and then transfers them to the federal government for preservation, says he has tried to get Chapman to sell at lower prices. "I know of no market data that would begin to justify a \$960,000 figure. That's just absurd," says Mulford.

The Forest Service's Zimmerman agrees, noting that the agency's previous studies of Chapman's land are in the \$300,000 range. Zimmerman cautions that the market hasn't jumped four-fold just because Chapman paid \$960,000. "One sale does not create a market," he says.

Forest Service officials say their visits to the site indicate that construction is in the very early stages, and question if the project was ever even designed to be finished.

"Essentially, what he's got up there is a floor on pillars," says Paonia District Ranger Steve Posey, who also says the footers and framework are very small. "It doesn't look to me like that would hold up a several hundred-ton log cabin. It

looks like someone was putting up a shack, not a mansion."

Local ranchers who have grazing allotments in the West Elks, and who have leased grazing rights on Chapman's inholding in the past, say there is only one spring on the property. They say it may not have enough water for one house, let alone six.

"I've seen that spring go dry some years," said one rancher, who asked that his name not be used.

If the Forest Service and Chapman can't agree on a price, it is unlikely Congress will make up the difference. Sen. Brown says he is against paying more than fair market value.

"We can't afford to provide any incentive for people to scar wilderness inholdings for extortion," says Brown. "The Forest Service has a delicate line to walk."

— Steve Hinchman

Steve Hinchman is a former HCN staffer who free-lances from Paonia.

HOTLINE

No more booze for bears

Bears love sugar, but in northern Montana it keeps killing them. Nine grizzly bears have died in the past five years after derailments spilled grain near railroad tracks. When grain gets wet it ferments, and the sweet, alcoholic result attracts the bruins. They gorge themselves, and then stagger around the area, failing to notice the next freight train. To save bears, Burlington Northern decided to reduce derailments. The railroad is replacing its track on problem curves with stronger rails and concrete ties along a 90-mile stretch through Glacier National Park. BN officials say the \$3 million project should keep the trains on — and the grizzlies off — the tracks, reports the *Engineering News Record*.



Steve Hinchman/Lighthawk

Tom Chapman plans to build four homes along Navajo Ridge in the West Elks

HOTLINE

Freddy's progenitor unearthed

Scientists in eastern Utah unearthed in July the remains of a prehistoric "killing machine" that may have been the most ferocious predator to walk the earth. Named *Utahraptor*, this meat-eater stood two stories tall and weighed close to a ton. Its mouth was ringed by two-inch-long serrated teeth, its hind feet sported 15-inch sickle-shaped claws and its "hands" grew 10-inch razor-sharp blades. Fruita, Colo., paleontologist Jim Kirkland said the Utah find provides clear evidence that some dinosaurs had "specialized hands." "Pound for pound, (the *Utahraptor*) was the most savage animal to walk this planet," Kirkland told *The Denver Post*. *Utahraptor* is believed to be the larger cousin of the *velociraptor*, or "slasher" dinosaur that lived some 125 million years ago. Before this discovery, scientists believed its largest relative stood only about six feet tall, not much bigger than today's human.

Midnight dumpers kill fish

Someone dumped an unknown poison into the Weber River near Ogden, Utah, Aug. 12, killing more than 63,000 fish. Wildlife officials are still investigating, but some speculate that a pesticide caused the deaths. Most fish were non-game species, but several hundred trout were also killed. Tom Pettengill, state regional fisheries manager, says midnight dumping in Utah's rivers is nothing new. "We have problems all over," he says, "although fish kills appear more frequently in dry years because rivers can't dilute the poisonous substances." At least three other significant spills have occurred on the Ogden and Weber rivers this year, reports the *Salt Lake Tribune*. Pettengill hopes that more exposure from the media and increased enforcement will deter dumpers.

Industry sues for salmon

Unusual coalitions are popping up in the Northwest. Two months ago, fishermen joined environmentalists to defend the spotted owl's habitat in some of the country's oldest trees (*HCN*, 7/13/92). Now, aluminum, titanium and chemical manufacturers have joined with environmental groups to demand protection of endangered salmon. On the manufacturer's behalf, a trade group filed suit in Oregon's U.S. District Court to force the government to study the effects of continued salmon fishing, hatchery production and poor habitat management. Less expensive hydroelectric power is one reason chemical and metal companies care about salmon. The industries pay more for electricity when regulatory agencies blame hydro plants for weak salmon stocks and force them to make expensive plant alterations, says John Carr, executive director of the trade group, Direct Service Industries. Carr believes electricity costs will not skyrocket for the companies he represents if all impacts to the salmon are addressed. "One of the best things that can happen to the salmon is to get their viability intertwined with the economic viability of industry in the Northwest," Carr says.

Custer battlefield changes its name

CROW AGENCY, Mont. — Custer Battlefield National Monument has a new name.

Thanks to an act of Congress last December, the site of Custer's Last Stand is now known as the Little Bighorn Battlefield National Monument. One hundred and sixteen years ago, Custer's Seventh Cavalry troops were overpowered by Plains Indian tribes, who had ignored Army orders to stop their summer hunting and report to the reservations. Custer's command was part of a large military force sent out to bring in the free-ranging Indians, who were considered "hostiles."

Custer and 264 of his party died in battle that afternoon.

Until recently, historical emphasis at the monument was on the Army's role in the battle. Then, three years ago, the National Park Service appointed Barbara Booher superintendent. She said her mission was to "concentrate on the balance of the story, so that both sides are represented."

The quiet, petite woman of Ute-Cherokee heritage in the ranger uniform stands in sharp contrast to previous superintendents, who relished their connection with the fabled Seventh Cavalry. Her office is decorated with Indian art; there's not a sword, bugle or flag in sight.

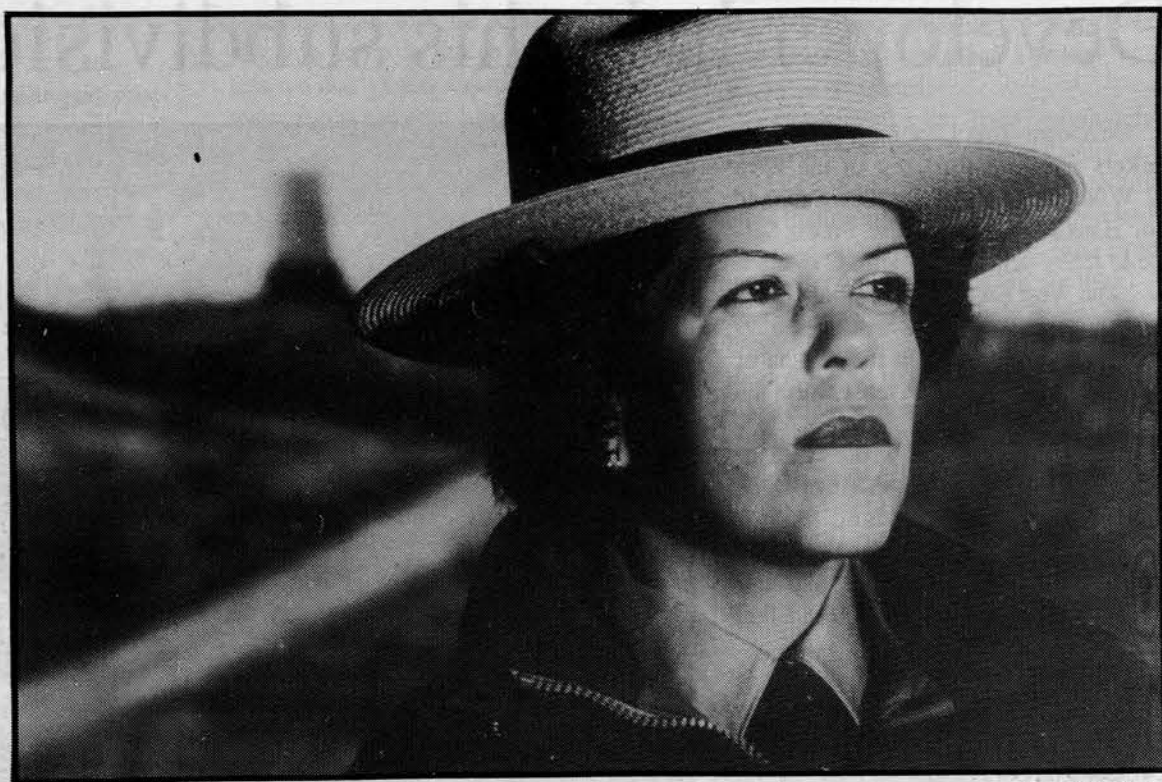
The museum displays and visitor interpretative tours have been revamped. "The program needed more balance," she explained. "It was traditionally told from a military perspective, because the Army controlled the battlefield until 1940, when the National Park Service took over, but the attitudes remained."

On a hot day before the June 25 anniversary of the battle, Booher walked from the lush green lawns of the Custer National Cemetery, through throngs of tourists in shorts and up the narrow path past pale yellow yucca blossoms and signs marked "Watch for snakes on trail." At the top of the famous treeless ridge, past the 111-year-old granite obelisk chiseled with the names of Custer's casualties, she pointed to a spot 100 yards east where a new Indian memorial will be installed.

The memorial project is part of the name-change legislation, sponsored by Ben Nighthorse Campbell, D-Colo., who is part Native American. The site was chosen by an advisory committee that included members of the tribes who defeated Custer. There will be a national design competition and the winning entry will be approved by the secretary of Interior. It may be at least two more years before the memorial is built. Until then, explained Booher, there will be no temporary attempt at a memorial.

"Everyone agreed that we will wait until it is done right."

On the battle anniversary in 1988, as a protest against the long oversight, American Indian Movement leader Russell Means and other activists cemented a large steel plate into the ground near the Custer monument. Welded letters read:



James Woodcock

Barbara Booher, superintendent of the Little Bighorn Battlefield National Monument

"In honor of our Indian patriots who fought and defeated the U.S. Cavalry in order to save our women and children from mass murder. In doing so, preserving rights to our homelands, treaties and sovereignty."

In mid-June, Means organized a Sioux Sun Dance at a site just off the paved roadway connecting the Custer battlefield with the Reno-Bentley Battlefield, five miles away. The road, heavily used by tourists, crosses land owned by a Crow family. The Indians blockaded the road at the property boundary and isolated the area for a few days. The action upset

findings only serve to fuel pet theories and stir up the international army of Custer buffs.

On a Billings radio talk show June 23, Steve Alexander, who flies out from Michigan each June to play Custer in the battle re-enactment, said Custer's death was "not according to the Cheyenne legend, where he was staked out on the ground and a 300-pound Indian woman sat on him and smothered him." Relating Alexander's statement brings laughter on the Northern Cheyenne Indian Reservation, 30 miles east of the battlefield.

Austin Two Moons Sr., descendant of Chief Two Moon, says the "legend" is false.

"For one thing, nobody weighed that much back in those days. There's so many lies in those books they sell over at the battlefield. It sure hurts me."

"My grandfathers were there. They didn't want to fight. A few nights before, one of Custer's Crow scouts rode into the Cheyenne and Sioux camp and warned 'em that the troops were goin' over to kill the Indians. That's how come they were pre-

pared. Otherwise, it would have happened like at the Sand Creek Massacre."

That massacre occurred in November 1864, when 700 Colorado volunteers led by a misdirected militia colonel charged a peaceful Cheyenne camp and killed 137 Indians, 109 of them women and children. The order to "take no prisoners" was issued in spite of Chief Black Kettle's flying of both the white peace flag and American flag over his lodge.

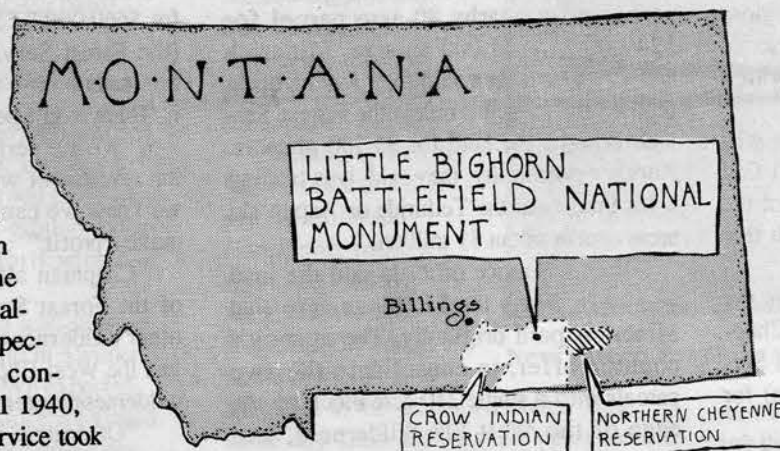
Afterward, the tribe's relations with the U.S. government were never the same.

Two Moons, 66, who has long hair and a classic, sculptured face, says, "It took 100 years. When I started praying for peace every year at the battlefield, that's when things started poppin'. Now, we'll get that name change, get that Indian memorial built."

Two Moons has traveled overseas as a peace emissary and native spiritual spokesman. On the morning of the anniversary of the battle, as he has done each June 25 since 1985, he faced the east from Last Stand Ridge and led a diverse group of people in a prayer for world peace.

— Pat Dawson

Pat Dawson is a free-lancer from Billings, Montana.



local tourism promoters, but, Kennard Real Bird said, "This is our land, and the Sun Dance participants had the right not to be disturbed under the Native American Religious Freedom Act."

Means and Real Bird chastised some members of the Crow Tribe for participating in the annual commercial Custer battle re-enactment that weekend, sponsored by a local chamber of commerce. The chamber and the Custer Country tourism promotion group joined the Custer buffs in opposing the monument name change last year. Dozens of Crows played the parts of Sioux and Cheyenne chiefs and warriors. Historically, the Crows were always at peace with the white government and scouted for Custer.

Through the years, Custer's defeat has spawned a tireless publishing industry and a cult-like fascination that has yet to peak.

University of Montana history professors once compared bibliographies of the Civil War and the Custer battle, and concluded that more paper had been produced on Custer's Sunday afternoon here than on the four-year war. And with no white surviving eyewitnesses, much has been speculation. Entire academic and professional careers are being built on fragments unearthed during archaeological surveys. New artifacts and forensic

Critics say Forest Service scapegoats grizzlies

The largest timber-producing national forest in Montana has exaggerated its acreage of commercial timber by 40 percent. That raises the likelihood that the Kootenai National Forest has overcut public lands for more than a decade.

In a study of so-called "phantom trees" in the northwestern Montana forest, Montana and Idaho conservationists found that the forest also underestimated its acreage of existing clearcuts by more than 500 percent. Comparing two sets of Forest Service inventory books, a new group called the Inventory Inquiry Project found that the 1987 forest plan assumed that hundreds of existing clearcuts were still mature timber. One consequence has been inflated promises to the timber-dependent communities about the forest's ability to supply timber.

The region's top grizzly bear recovery official separately reached the same conclusion earlier this year. The U.S. Fish and Wildlife Service's grizzly recovery chief, Chris Servheen, told his boss in Denver that Kootenai managers now believe their current cut level is based on erroneous assumptions. However, Servheen has been unsuccessful in persuading forest officials to tell that to the public.

Federal documents, obtained under the Freedom of Information Act, indicated that the Kootenai cut level should be one-



Steve Thompson

Kootenai National Forest clearcuts in the upper Yaak drainage

half to one-third less than targets set in a 1987 forest plan. The difference between cut levels promised in 1987, and what actually appears to be a sustainable annual level, is almost 20,000 loaded logging trucks per year.

Like most other Rocky Mountain forests, the Kootenai National Forest has failed to meet its logging target every year since 1987. In a report this spring, forest officials said the main reasons were watershed degradation and requirements to protect wildlife, notably the threatened grizzly bear.

"The Forest Service has refused to publicly acknowledge the facts, watching our communities become polarized with economic fears and distrust," charged Liz Sedler of Sandpoint, Idaho. Sedler is an inventory project member.

Although they won't publicly disavow 1987 timber targets, forest officials have agreed that the Inventory Inquiry Project raises "reasonable questions" about the amount of commercial timber that remains.

In an unusually blunt letter to the Kootenai forest supervisor, Servheen said the Forest Service makes the grizzly bear a scapegoat. He urged Kootenai officials to "tell the truth" about their unattainable logging level.

"This high level of expectation has created a false economy in northwest Montana," Servheen wrote in a June 4 memorandum to his superiors. "This high expectation has also created a high level of economic insecurity that has led to a 'blaming' mentality where people are actually killing bears because they have

little economic security."

In recent months, angry residents in the small logging town of Libby have defaced wildlife protection signs and have written letters to the local newspaper threatening to kill grizzly bears. They have cited the Forest Service report in blaming bear management for the forest's failure to meet its timber target.

Servheen concluded that the forest has been overcutting for more than a decade, and future logging levels will have to reflect past abuses. Already, large patches of the forest are off-limits to loggers because the forest is in violation of its own guidelines for water quality and wildlife habitat.

Compounding watershed problems and the declining timber supply is the accelerated logging program during the 1980s on intermingled Champion International forestlands. Champion has virtually liquidated its 700,000-acre commercial timber holdings in Montana and now is selling all of its land and mills in the state.

Members of the Inventory Inquiry Project also included Yiri Daskocil, Don Vance and Leroy Lee. For more information, call Liz Sedler at 208/263-5281.

— Steve Thompson

Steve Thompson is an environmentalist and free-lance reporter in Moscow, Idaho.

Idaho canal's failure undermines FERC

The June 11 collapse of a section of the Marysville canal near Ashton, Idaho, continues to reverberate throughout the state.

The collapse dumped tons of silt and sediment into the Fall River and the Henry's Fork, wreaking havoc on river ecology in both world-renowned trout streams. The silt buried newly laid eggs and ruined winter habitat for small fish. Officials at the state Department of Fish and Game expect a significant loss of trout-spawning areas in the 12 miles of the Fall River and for some distance downstream on the Henry's Fork.

The 100-year-old, unlined irrigation canal collapsed after water in it seeped beneath a buried diversion pipe. This weakened the canal, then finally washed it out. The water that escaped carried between 20,000 and 40,000 tons of silt into the Fall River — the equivalent of several thousand dump truck loads.

The buried pipe was part of the Marysville Hydroelectric Project, a private venture between Idaho developer Grant Durtschi and a subsidiary of Ida-West Energy Company in Boise. Licensed by the Federal Energy Regulatory Commission (FERC) in May 1989, the project was under construction at the time of the canal's collapse.

As news of the accident spread, Idahoans were reminded of the Teton Dam failure that killed seven people in 1976. Once again, critics questioned the ability of a distant federal agency to oversee hydro projects in their state. Idaho Gov. Cecil Andrus said he would try to halt the new project. "FERC just thumbed their noses at us," Andrus told the Idaho Falls *Post Register*. "Now we have a disaster on our hands."

Although construction started in 1989 and is about 75 percent complete, FERC has never conducted an on-site inspection, said Sharon Murphy, a spokeswoman for FERC.

"The only information that FERC got during the project's construction were periodic statements by the developer," said Jon Ochi, chairman of Friends of Fall River, a Marysville-based conservation group. There was no outside inspection,

he said, even though the canal has a history of failures, with a bank collapse occurring about every four years.

Nearby residents are concerned that damage to the fishery could harm local economies. The small towns of Rexburg and St. Anthony rely heavily on tourists and anglers, Ochi said.

However, studies done for the owners of the hydro project, Marysville Hydro Partners, show the rivers may not be as damaged as first suspected, said Kip Runyan, vice president for Ida-West Energy Co.

Ochi is skeptical about the good news. "(One) study is superficial," he said. "It was done by one person, in one area, in one day and the biologist admitted he couldn't even see the bottom of the river."

Besides the impacts from the collapsed canal, the project could pose other problems.

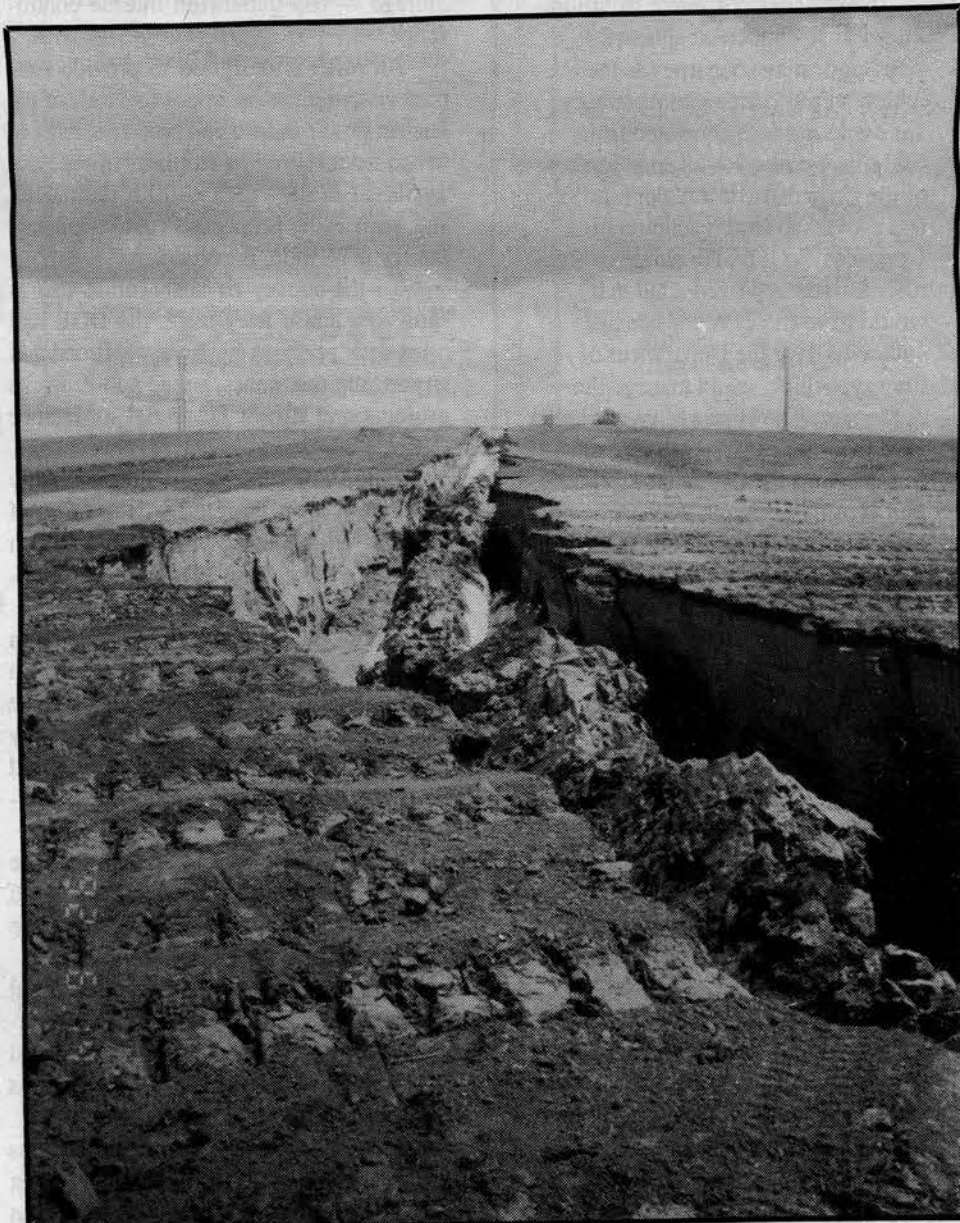
Ochi said when the generator is running at full capacity, a 5.5-mile section of the Fall River will be dewatered, reducing the season of a popular whitewater stretch from nine months to six weeks.

Another concern is that the canal must be enlarged to accommodate more water needed for the hydro project. Ochi said that at full operation the canal will carry eight times as much water as it did during the June 11 collapse. "We're worried that this tragedy could be peanuts compared to what could happen," Ochi said.

Runyan, however, said the company's plan to enlarge and line the canal would eliminate the seepage and erosion that have plagued the canal in the past.

The \$15 million, 9.1-megawatt Marysville Hydroelectric Project has been shadowed by safety warnings from the beginning. "The soils in the project area are highly erosive," warned Bob Breckenridge, a soil and water engineer and resident of Idaho Falls, in an April 1991 letter to FERC.

In another letter to FERC, engineers Steven Marts and Ray Schwaller, commissioned by Friends of Fall River, found the following impacts "highly probable": blowouts of the canal and eroded soil.



Janice M. Brown

Rushing water from the failed Marysville canal created this trench

Nevertheless, FERC licensed the project without holding a public meeting. Ochi charges that the agency's procedures, while legal, are inadequate.

Last year alone, FERC had jurisdiction over 1,800 hydro projects throughout the country and was swamped with more than 180 applications for new hydro project licenses, plus many relicenses (HCN, 12/2/91).

Back in Idaho, Gov. Andrus is push-

ing to take control of hydroelectric resources away from Washington, D.C., and put it into the hands of the state.

For its part, Marysville Hydro Partners put \$150,000 into a trust fund for biological studies and to mitigate damage from the collapse. But, said Scott Peyron, a spokesman for Gov. Andrus, "the trust fund is a moot point for the governor and it doesn't treat the problem as he sees it."

— Peter Donaldson

HOTLINE

A clash over grazing cuts

Objecting to a Forest Service compromise with ranchers, the Environmental Protection Agency has recommended an end to all grazing on Montana's Upper Ruby allotment. But the Forest Service is not taking the EPA's advice. It is holding to a June proposal to reduce cattle grazing in the Beaverhead National Forest by 25 percent (*HCN*, 6/1/92). An earlier agency proposal called for a 44 percent reduction, which was "much more acceptable," EPA's Jeff Bryan told Associated Press. Some damaged areas in the valley may need 20 to 30 years to recover. According to Forest Service studies, grazing on the allotment has eroded streambeds and filled waterways with silt. Rest the West and the Alliance for the Wild Rockies, both environmental groups, have appealed the Forest Service decision and also request the removal of all livestock from the Upper Ruby. The groups say the Forest Service's plan fails to address the impacts on biodiversity, grizzly populations, wolf recovery and water quality. The Forest Service has until mid-October to decide on the appeal, and is currently meeting with the EPA to discuss their disagreements.

Will Senate bill get WIPPed?

New Mexico's Waste Isolation Pilot Plant, conceived almost 20 years ago, may soon open as the nation's first permanent repository for nuclear waste generated from building bombs. Regulatory control of the project, its last major hurdle, has moved toward resolution in Congress. In July, the House of Representatives approved a bill that would give the EPA considerable authority over the Department of Energy, which would manage the dump site. The House bill would also give the Nuclear Regulatory Commission and the Occupational Safety and Health Administration some control over how the site is run. The bill would limit the amount of low-level waste for testing to 4,000 barrels before opening the repository to its expected 750,000-barrel capacity. Last year, the Senate approved a bill for the site that has looser restrictions, allowing more waste for the test phase and less regulatory oversight. This September, a joint House-Senate committee will strike a compromise between the two bills. "The Senate bill is a bad bill because it doesn't provide any of the environmental health or safety provisions that we need," says Don Hancock of the Southwest Research Information Center. "The House bill, on the other hand, has more assurances for the people of New Mexico."

BARBS

An Imelda of the natural world.

A fox stole 300 shoes left outside homes in Santa Barbara, Calif. When finally discovered, the fox's lair also contained several copies of the *L.A. Times* and *Wall Street Journal*. Biologists think the fox chewed on the shoes for salt, but were unable to explain its taste in newspapers.

Radioactive dollars draw tribes

The U.S. Department of Energy continues to dangle the carrot of nuclear waste storage, along with money to study the idea, before the hungry eyes of Indian tribes and rural counties in the West.

This spring and summer, 16 tribes and four counties applied to the DOE for \$100,000 grants to explore hosting a temporary waste facility (see list below). Four tribes have dropped out of the race and five tribes and two counties have been awarded the \$100,000 grants so far. One tribe, the Mescalero Apaches of New Mexico, has advanced onto phase II of the process, receiving an additional \$200,000.

In each case, the possibility of hosting the facility, known as MRS — Monitored Retrievable Storage — has generated intense controversy.

An MRS is designed to provide temporary storage for the spent fuel rods of the nuclear power industry. The waste, most of which would come from plants in the East, would sit in the MRS until a permanent site, such as the proposed Yucca Mountain facility in Nevada, is constructed.

To the county or reservation that is chosen to house the waste, the DOE will offer such perks as highway, railroad and airport improvements, other public works projects and direct financial assistance (*HCN*, 1/27/92).

Some are distressed that so many tribes have been targeted by the DOE. "If you're hurting bad enough, you'll sign anything," Rep. Ben Nighthorse Campbell, D-Colo., told *The Denver Post*.

Campbell, a member of the Northern Cheyenne Tribe, also drew a comparison between the sites being courted for waste and those chosen as reservations a century ago. "It was the worst land they could find," he said. "The government is playing the same game."

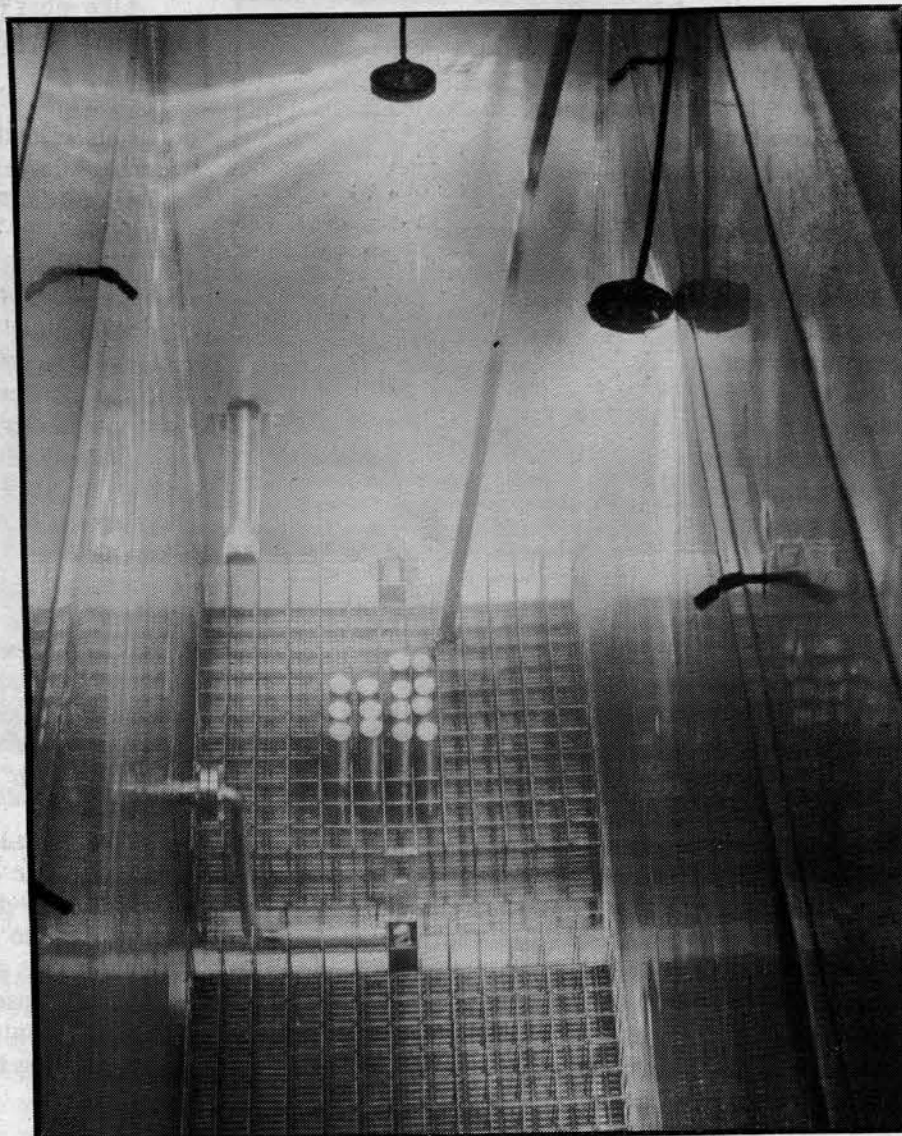
He said nuclear waste should be stored where it is generated. "I hate to see it happen on Indian reservations because they are susceptible to anything."

One spokesman for a national tribal organization said he would be "real surprised" if any of the tribes actually go all the way through with the MRS process because of its level of controversy.

So far, only the Mescalero Apaches have moved on to the next, more complex phase of study to determine how feasible an MRS would be on its southern New Mexico reservation, said DOE spokeswoman Samantha Williams. The tribe can now position itself to receive up to \$2.8 million more, which would be used to examine the merits or drawbacks of a specific site.

The tribal government faces strong opposition, both from within the tribe and from surrounding communities. New Mexico Gov. Bruce King has vowed that an MRS will never be built in his state.

Other governors have voiced similar opposition. Counties applying to the DOE for the MRS grant must first obtain a let-



Battelle-Northwest Photography

Nuclear fuel rods under water at the Hanford Nuclear Facility in Washington

ter of approval from their governor. Colorado and Kansas governors refused. When Labette County, Kan., wanted the grant, Gov. Joan Finney responded, "In my judgment, we have already created far too many national sacrifice zones dedicated to nuclear industry activities." She added that an MRS may channel resources away from efforts to find a safe, permanent home for the waste.

Utah, however, is moving forward with two MRS study applications. The Goshute Indian Tribe, which has a small reservation in Skull Valley, about 50 miles southwest of Salt Lake City, has applied, and commissioners in San Juan County in the southeastern corner of the state voted in May to become a study site.

The county's decision drew immediate fire from the Navajo Nation, a portion of whose reservation lies in San Juan County. Navajos, who make up 50 percent of the county's population, have spoken out against federal attempts to put nuclear facilities on or near reservations.

waste because of past uranium mining.

"We've been involved in the uranium industry for many years," said Rick Bailey, assistant to the San Juan County Board of Commissioners. "It's provided jobs and funded our school system. Uranium has been very good to us."

In Fremont County, Wyo., the local government applied for and received a "phase one" grant, much to the consternation of many residents in Riverton, Dubois and Lander.

Gov. Mike Sullivan stepped in last month, telling the county not to proceed further.

"I simply do not endorse the wisdom of the policy (for storage) adopted by the federal government," said Sullivan, "nor do I trust the federal government or the nuclear industry to assure our interests as a state are protected."

— Caroline Byrd

Caroline Byrd is a former *HCN* intern.

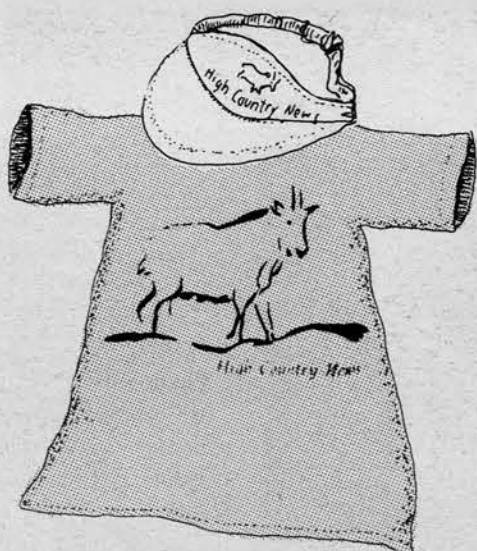
Nuclear waste candidates

As of Aug. 11, 1992, the following have applied for an MRS study grant:

1. Mescalero Apache Tribe, New Mexico
2. Grant County, North Dakota
- * 3. Chickasaw Indian Nation, Oklahoma
4. Fremont County, Wyoming
5. Prairie Island Indian Community, Minnesota
- * 6. The Sac and Fox Nation, Oklahoma
7. Yakima Indian Nation, Washington
8. Apache County, Arizona
9. Skull Valley Band of Goshute Tribe, Utah
10. Alabama-Quassarte Tribe, Oklahoma
11. Eastern Shawnee Tribe, Oklahoma
12. Tetlin Village Council, Alaska
13. Lower Brule Sioux of South Dakota
14. Akhiok-Kaguyak, Inc./Akhiok Traditional Council, Alaska
15. Apache Development Authority, Oklahoma
- * 16. Absentee Shawnee Tribe, Oklahoma
17. San Juan County, Utah
18. Ponca Tribe, Oklahoma
- * 19. Caddo Tribe of Oklahoma
20. Labette County, Kansas
21. Fort McDermitt Paiute-Shoshone Tribe, Nevada/Oregon

* withdrew application

Source: Department of Energy



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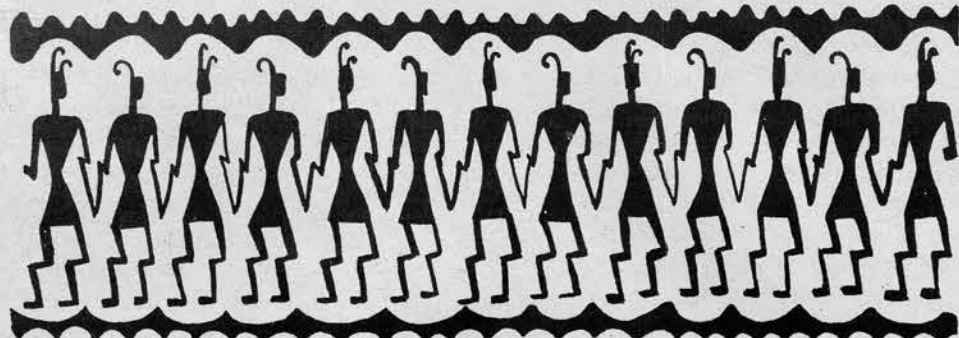
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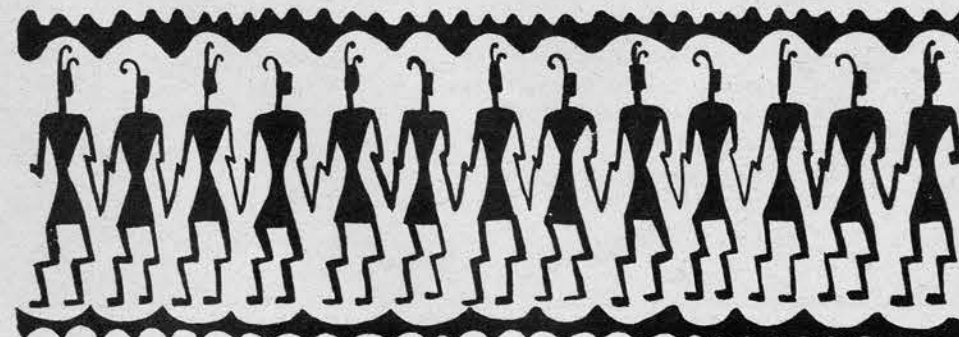
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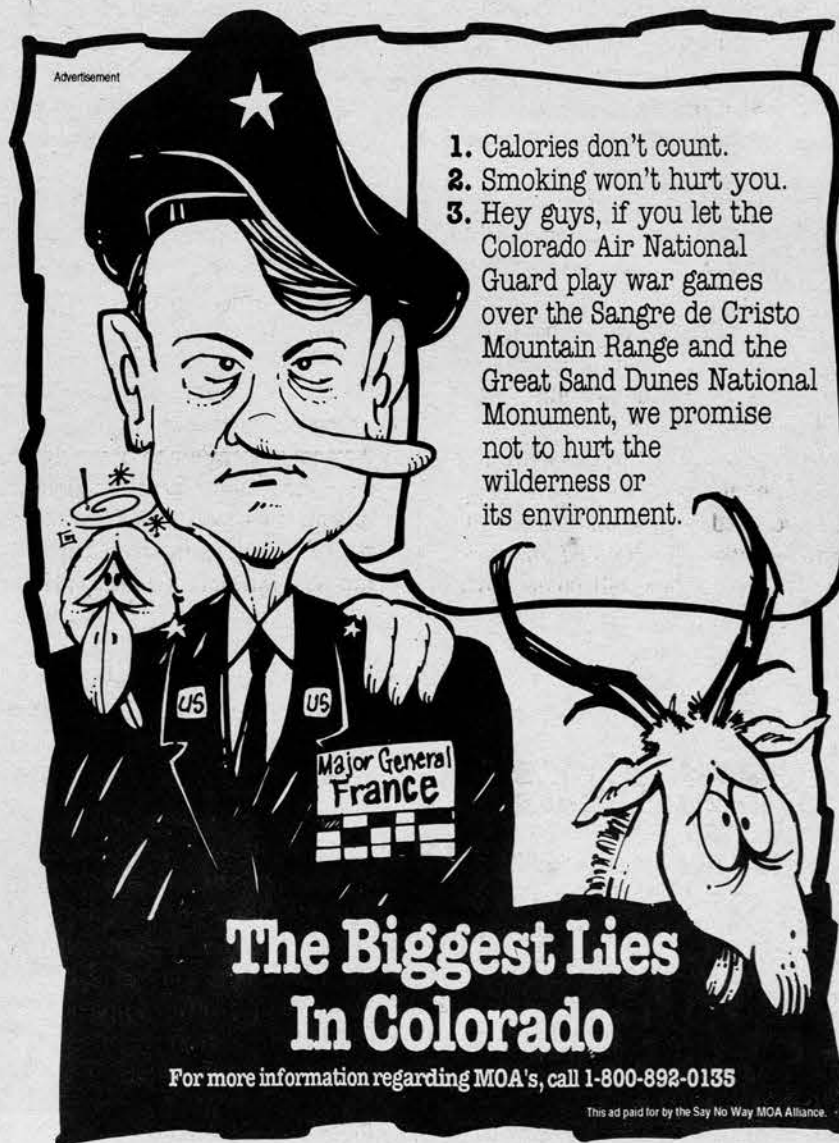


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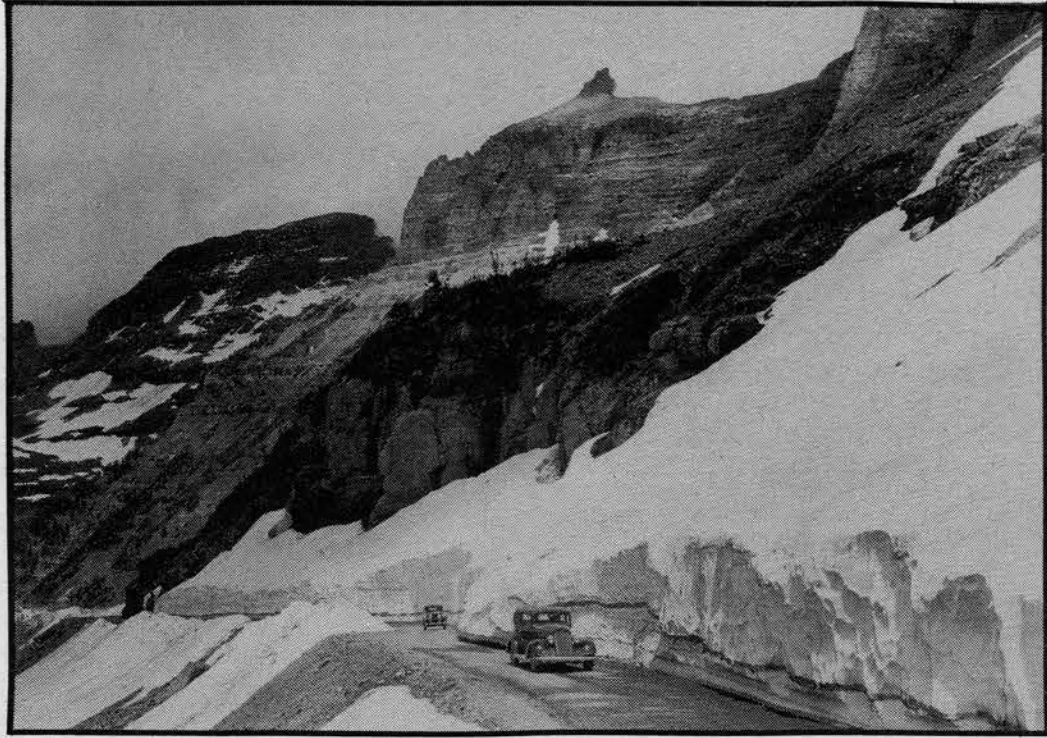
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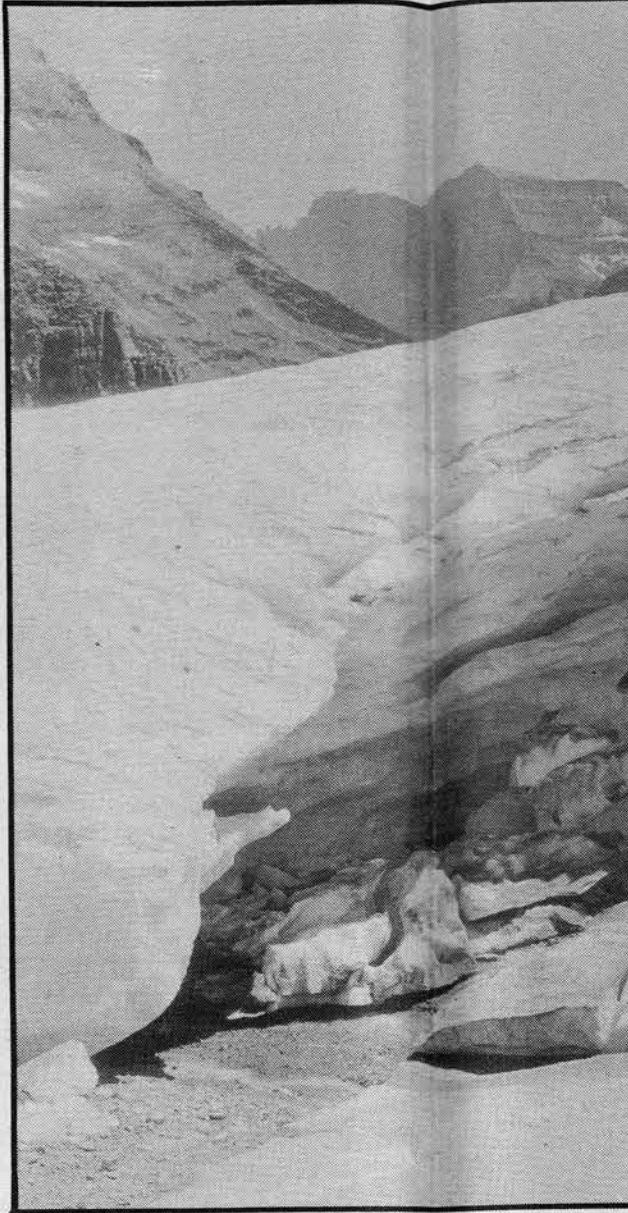
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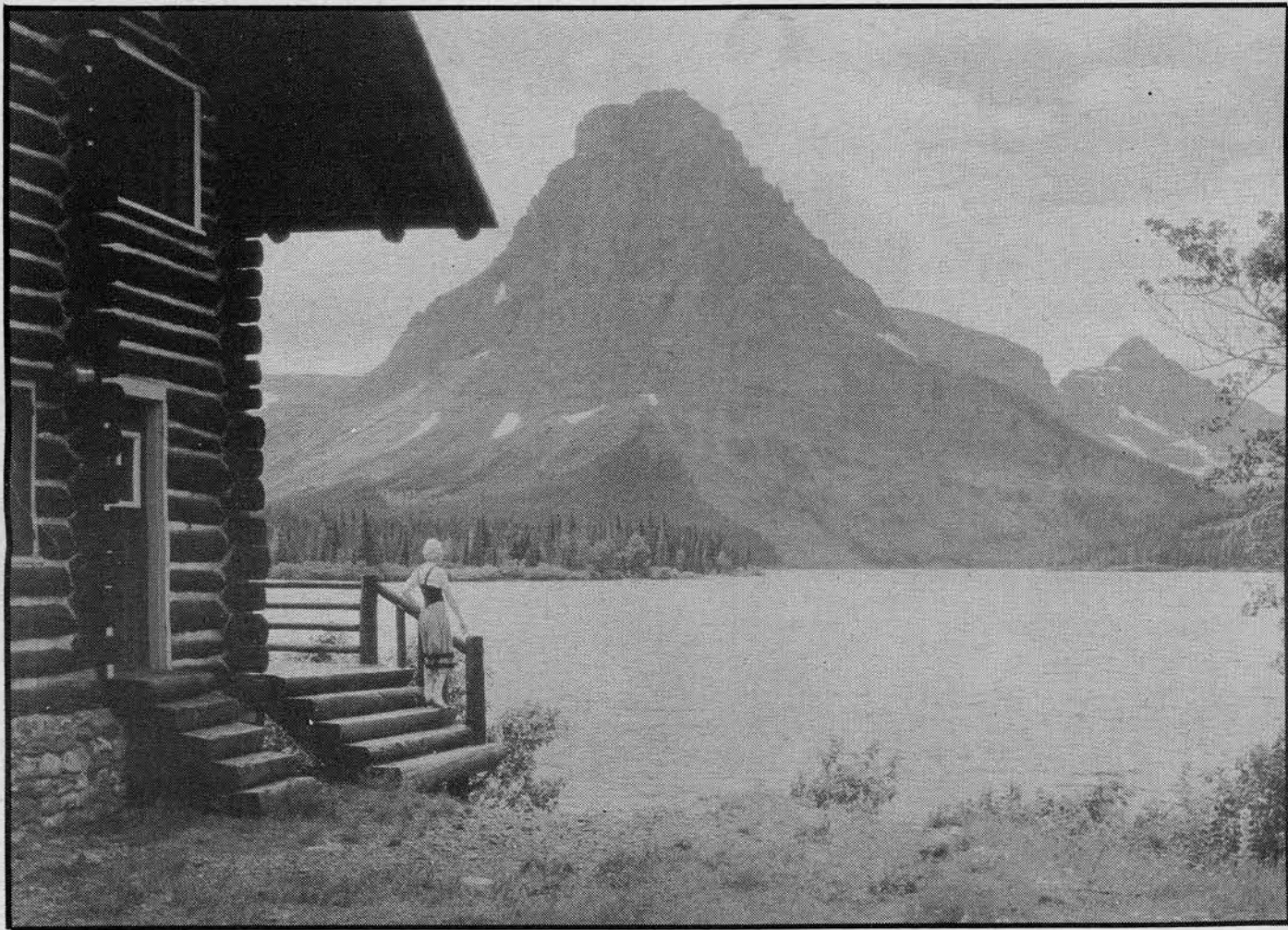
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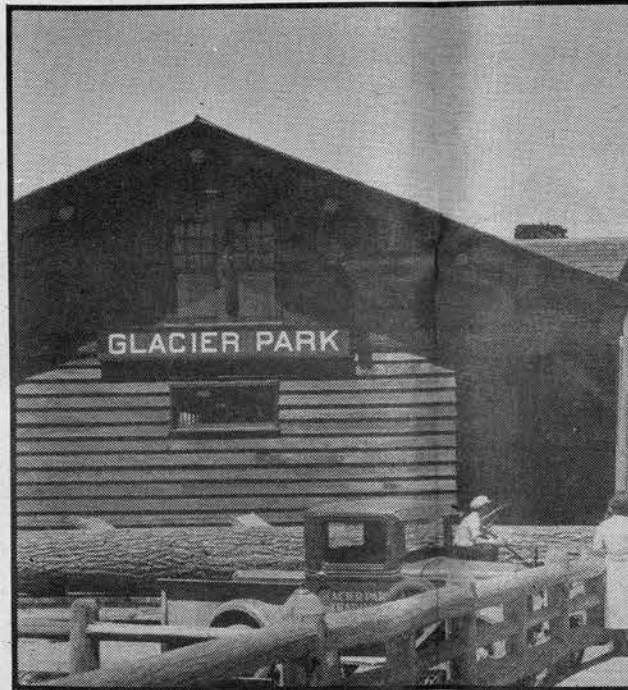
Tin Lizzies drive on a cut through a snowfield on the Going-to-the-Sun Highway



Ice cave stares back at its admirers on Boulder Glacier



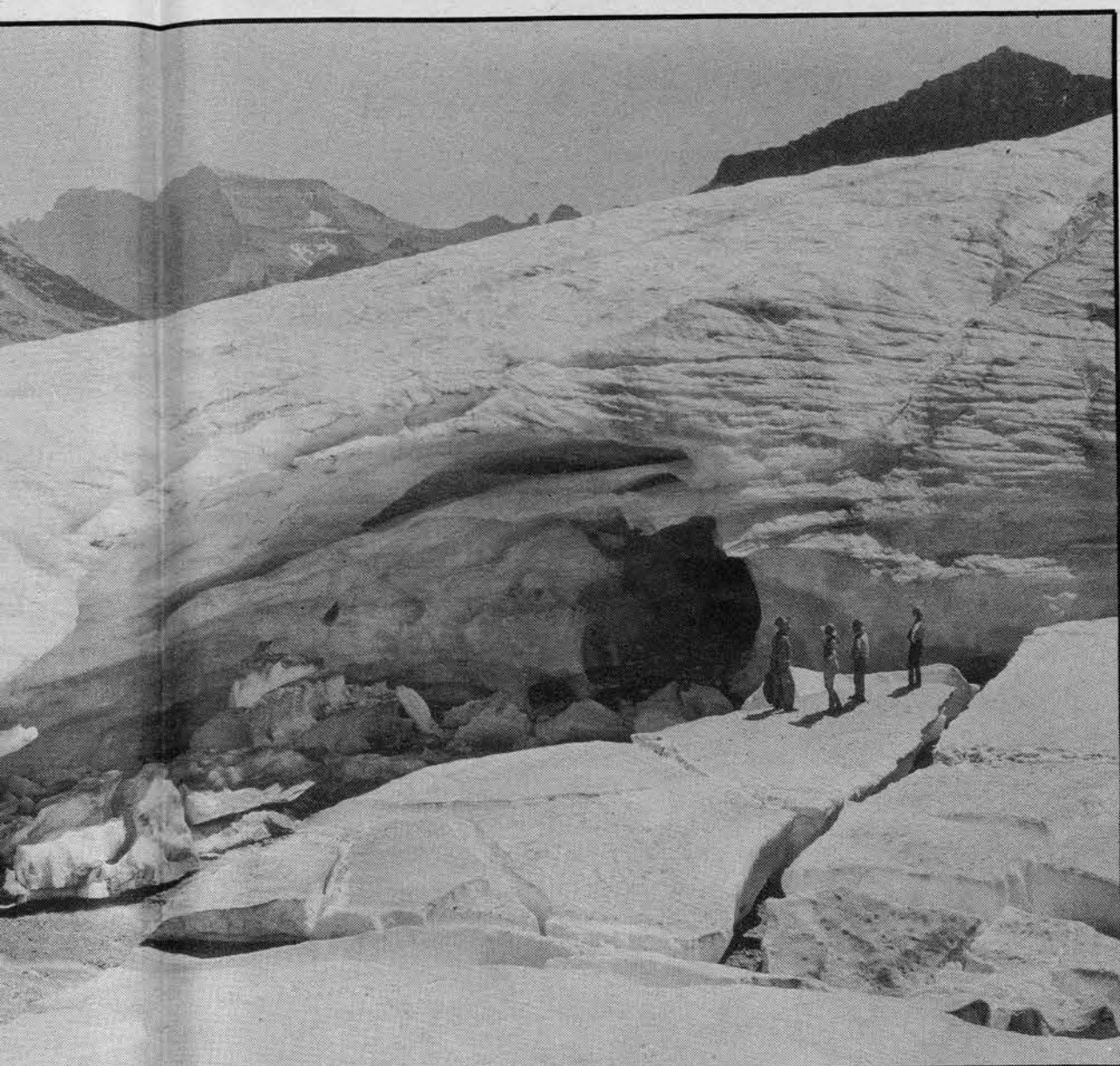
Stealing an identity: Two Medicine Chalet and a "Swiss" waitress



The imposing Empire Builder: No match for tin L



Tourists and one of their Lizzies at Many Glacier tent camp



Look at its admirers on Boulder Glacier

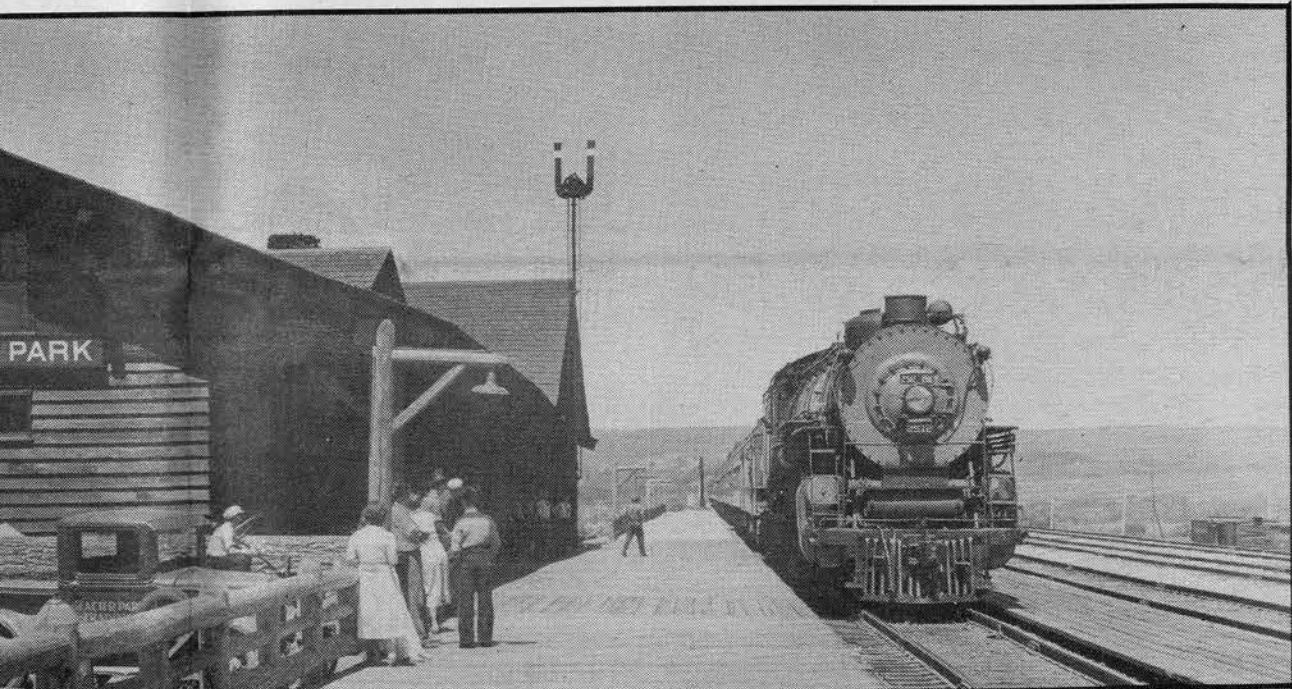
A tracked, moneyed world gives way at Glacier

In 1932, Glacier National Park's Going-to-the-Sun road was nearly complete. The highway transformed the park, changing the dominant vehicle for exploration from horse to automobile.

No longer were the alpine heights of Glacier the exclusive domain of the Eastern tourist who spent days or even weeks on horse trails. About 8,000 of these well-off tourists had arrived every summer on the Great Northern Railroad, their lodging alternating between the sumptuous accommodations of the Glacier Park Hotel Company and the deluxe mountain tent-camps of the Bar X 6.

A golden age of park travel — for those who had the means and the time — began to fade away in the 1930s. From then on, any American family owning a "tin Lizzy" could discover this gem in Montana.

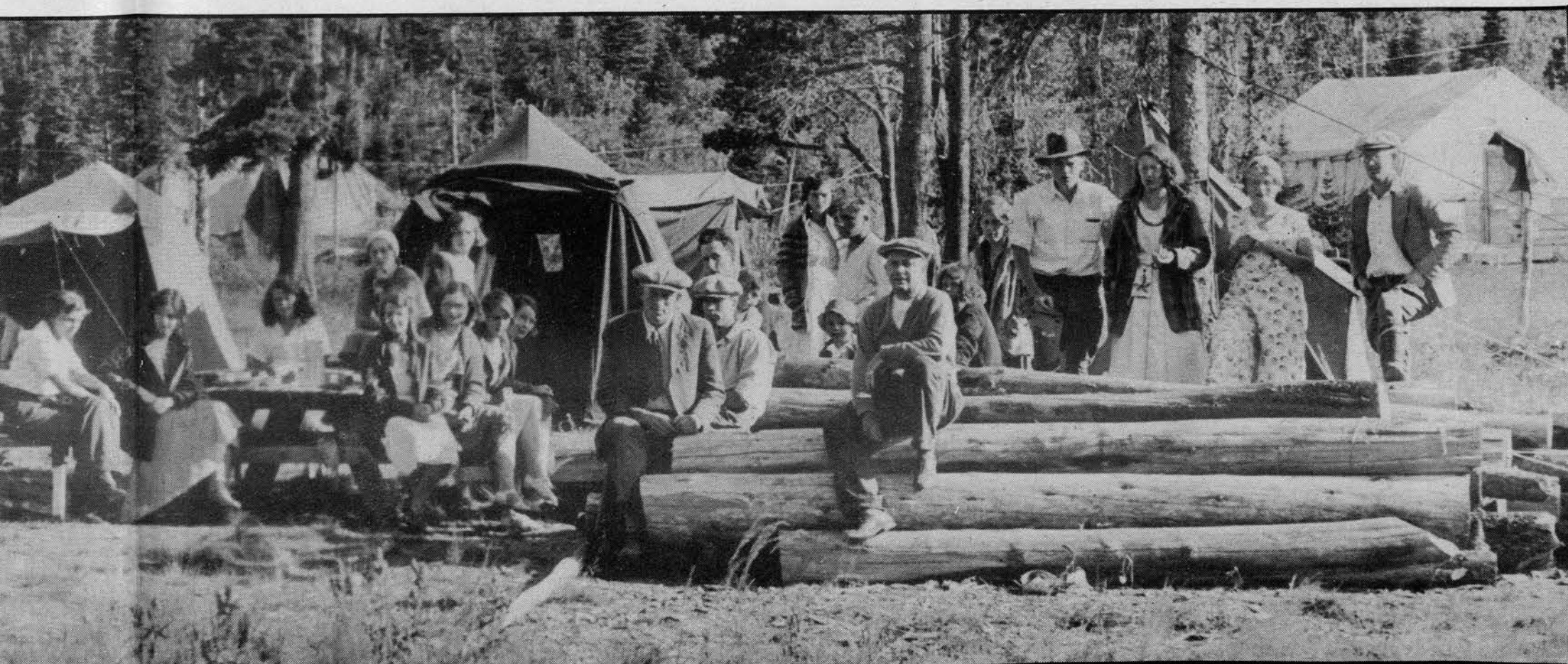
Photos circa 1932-1934 from plates in the George A. Grant collection. Photos from Trains, Trails, & Tin Lizzies, published by the Glacier Natural History Association, West Glacier, Mont., 1987.



Empire Builder: No match for tin Lizzies

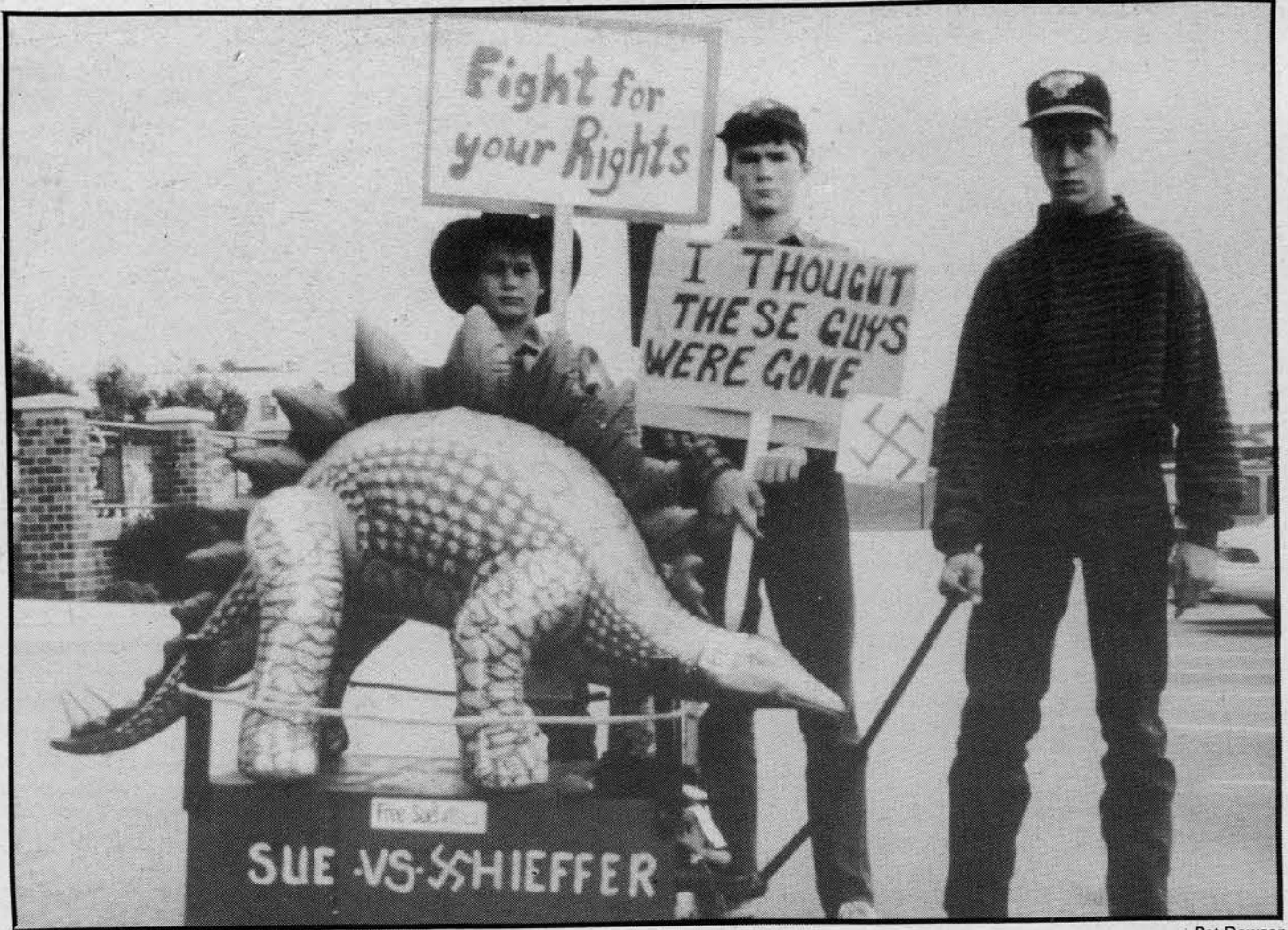


The mountains pose for tourists at Ptarmigan Tunnel parapet



'Fossils are the last American gold rush.'

— Pat Leiggi,
Montana State University
paleontologist



Pat Dawson

Youngsters show their support for Sue

Battle for the bones ...

(continued from page 1)

"Sue," the biggest skeleton of a *Tyrannosaurus rex* ever found.

As local residents protested on the sidewalk, agents crated the beast and hauled it to nearby Rapid City. There its bones sit in a steel storage bin as a court battle drags on, making the 65 million-year-old beast a centerpiece of the modern bone wars.

"There was a time that amateur, commercial and academic collectors worked together for the advancement of the science and art of paleontology," Larson told the conference. "However, recent events have divided the we into us versus them."

Larson called supporters of the Baucus bill "the royal priesthood of paleontology, who would only open science to themselves."

Sue, named for the fossil prospector Susan Hendrickson, who discovered it in 1990, was dug out of a hillside on the Cheyenne River Sioux Indian Reservation in South Dakota. Larson's firm paid the Indian landowner, Maurice Williams, \$5,000 for the right to

dig up the dinosaur.

But the real landowner was the federal government, which held Williams's land in trust. It is a common arrangement that gives Indian property owners a tax exemption.

Since Larson had never obtained federal permission to dig, Acting U.S. Attorney Kevin Schieffer said Sue was dug up illegally. Larson says everything was legal and is suing to get Sue back. Meanwhile, the Cheyenne River tribes, which now want Sue for their museum, have intervened in the case.

In addition to its scientific and educational value, Sue is worth money. Two years ago, Leiggi recalls, a Japanese company offered Montana State \$4 million for a *Tyrannosaurus rex* its teams unearthed in eastern Montana.

But the Black Hills Institute had no plans to sell Sue, Larson tells everyone who will listen. Instead, the firm had already donated the dinosaur skeleton to a related non-profit group that intended to make it a centerpiece of a new museum.

The museum would be located in South Dakota's touristy Black Hills and open to scientific study, Larson says.

Thus far, a federal judge has refused to give Sue back to the fossil company, saying the firm's interests "are more commercial

than scientific."

U.S. District Judge Richard Battey was also critical of Robert Bakker, a Colorado paleontologist who was one of the first to contend dinosaurs were far more active than once thought. The judge called Bakker a "zealot of the first order" for his defense of Larson's institute. Judge Battey also complained that Larson's side has "attempted to make this seizure a media event."



While Sue's impoundment added fuel to a fire that has been smoldering in paleontological circles for years, it also changed the character of the bickering. Instead of writing letters to scholarly journals, both sides are lashing out publicly, testifying against each other in court and pushing for solutions in Congress.

In June, leaders of the Society of Vertebrate Paleontology, a group of fossil scholars, voted to expel anyone dealing in fossils found on federal land — an action apparently aimed at Larson.

In turn, several members, including a top scientist from the Smithsonian Institution — which has received donated specimens from Larson's firm and bought some from him, too — quit the organization.

"As a body, we're not rabble rousers," says Jason Lillegraven, a University of Wyoming professor. But he told the Rapid City conference that things had gotten out of hand. "When the prices of these pieces take them out of circulation for study, it's time to be concerned."

In 1987, a National Academy of Sciences panel declared "paleontology is best served by unimpeded access to fossils" and urged that all public land be open to digging. But the Society of Vertebrate Paleontology, which remains split on the subject, beat back that idea.

Fossils have long been sold as curiosities, and some of the best dinosaur discoveries have been profit-driven. In 1977, two trainmen got eastern paleontologists interested in Como Bluff, a prolific Wyoming boneyard, after sending a

'It's the royal priesthood of paleontology' that supports the Baucus bill.

— Peter Larson,
president of the
Black Hills Institute for
Geological Research



The skull of Sue and Terry Wentz, who was working on the *Tyrannosaurus rex* bones when the FBI seized them

box of bones, with a note: "If we can sell the secret of the fossil bed and procure work in excavating others we would like to do so."

All five known specimens of *Archaeopteryx*, the possible evolutionary link between dinosaurs and modern birds, were collected by European quarrymen eager to supplement their paychecks. One specimen, however, is now missing, prompting speculation that its private owner sold it or lost it.

Regardless, commercial collectors argue, such important discoveries show that private enterprise can be an energizing force — even in science.

Only in recent years, however, have remains of ancient life become as highly valued as prized artworks, says William Clemens, curator of paleontology at the University of California, Berkeley.

That is partly due to rising demand for relics in Europe and Japan. New museums are going up but few fossils are available locally, he says. Ecological Enterprises, Inc., of Ardmore, Okla., lists "one of the top 10 skulls ever found" of a horned *Triceratops*. It costs \$200,000. The dealer also sells "the most complete skeleton known" of what may be a type of duck-billed dinosaur. A catalog from Prehistoric Journeys offers bags of dinosaur eggshell for \$10, fossilized dinosaur dung for \$12 or \$20 depending on size, and the skull of a 36 million-year-old rhinoceros-like animal for \$7,500.

Prehistoric Journeys generally gets its specimens from field collectors and then prepares them in its California laboratory, says James, although its staff can lend expertise on important excavations. Geological Enterprises owns a dinosaur quarry in Wyoming, where museum teams can also dig. Recently that firm discovered and recovered the nearly complete skeleton of a *Triceratops*; when mounted, it will be only the fourth full display skeleton of that dinosaur in the world.

The Santa Barbara firm even has a layaway plan, which James says is designed so even a school kid can pay off a \$50 dinosaur tooth, making such remains more accessible to the public.

But Clemens complains that few sales are so innocent. Some Japanese museums hire fossil brokers to obtain display specimens from American dealers or from major annual gem shows in Denver, Colo., and Tucson, Ariz., which deal in fossils as well. "Once this material is sold and leaves the country or goes onto someone's coffee table, it could be lost forever," says Clemens, who is also president-elect of the Society of Vertebrate Paleontology.

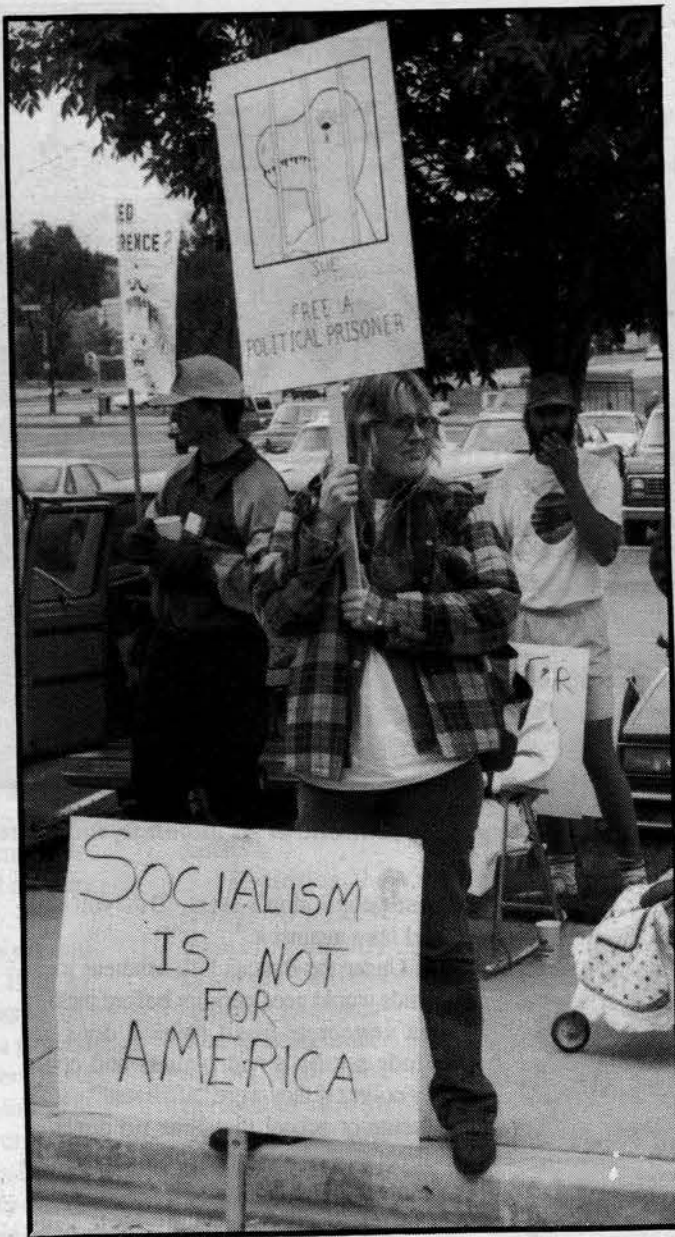
Clemens also asks, "Who are the elitists? Those who consider the scientific value of fossils paramount, or those who reserve items only for those who can afford to pay for them?"

Robert Emry, a paleontologist for the Smithsonian Institution, which itself has bought fossils in the past, agrees. "It has become almost impossible for museums to purchase major specimens because of the prices commercial collectors can get for them."

Especially critical is information about a specimen's geological context, which can give clues to the environment an animal lived in, how it lived and why it might have died. Such information can be scarce when a fossil is sold in a shop, says Hannan C. LaGarry-Guyon, who monitored fossil theft as part of the Nebraska study.

His team saw fossils for sale in rock shops that still had residue from soils found mostly on public lands, but were listed as having come from private lands, where for-profit digging is legal.

Some types of fossils — most notably fossil fish that are removed by the truckload in southwestern Wyoming



Michael Milstein

Supporters of Sue at a rally

and sold in curio stores — are very common. But for scientists studying the evolution or population characteristics of fossil turtles, for instance, it's not each turtle that's important, but the numbers and differences among them. To study such subjects, they need access to large numbers of fossil turtles, LaGarry-

In Utah, collectors drill and dynamite cliffsides to free fossils to make into jewelry, says Martin Phillips, head agent for the U.S. Bureau of Land Management there. "They remove it by the ton."

The skeleton of one of the youngest

Guyon says.

And the monetary value of fossils has made it more difficult for some non-profit scientists to get permission to dig on private lands.

When Emry began collecting prehistoric mammal fossils across the West 35 years ago, few minded. Landowners now still let him look, "but every time I pick something up, they'll say, 'What is that worth?'"

One North Dakota rancher, learning from bone dealers that a dinosaur skeleton on his land could bring several thousand dollars, led friends on a dig with spades and a cooler of beer, says state paleontologist John Hoganson. They destroyed most of the remains of a rare type of dinosaur, he says.

Public lands in the West, which are often rough and difficult to reach, are among the best places to find bones.

continued on next page

Taking sides

A prime proponent of closing public lands to for-profit digging is the **Society of Vertebrate Paleontology**, W436 Nebraska Hall, University of Nebraska, Lincoln, NE 68588-0542 (402/472-4604).

The **Black Hills Institute** is a major proponent of opening public lands to commercial digging. It is a member of the American Association of Paleontological Suppliers, which has compiled a code of ethics for commercial fossil collection. The Black Hills Institute of Geological Research, Inc., can be reached at P.O. Box 643, Hill City, SD 57745 (605/574-4289).

The sponsor of a bill to close federal land to for-profit digs is **Sen. Max Baucus**, D-Mont., Washington, DC 20510 (202/224-2651).

Private versus public science



he contention over Sue comes not long after the discovery last fall of a rare, flesh-eating allosaur in Wyoming. A commercial fossil collector from Switzerland was digging in a dinosaur quarry that had been abandoned for decades when his team strayed onto unmarked Bureau of Land Management property. There they found the allosaur.

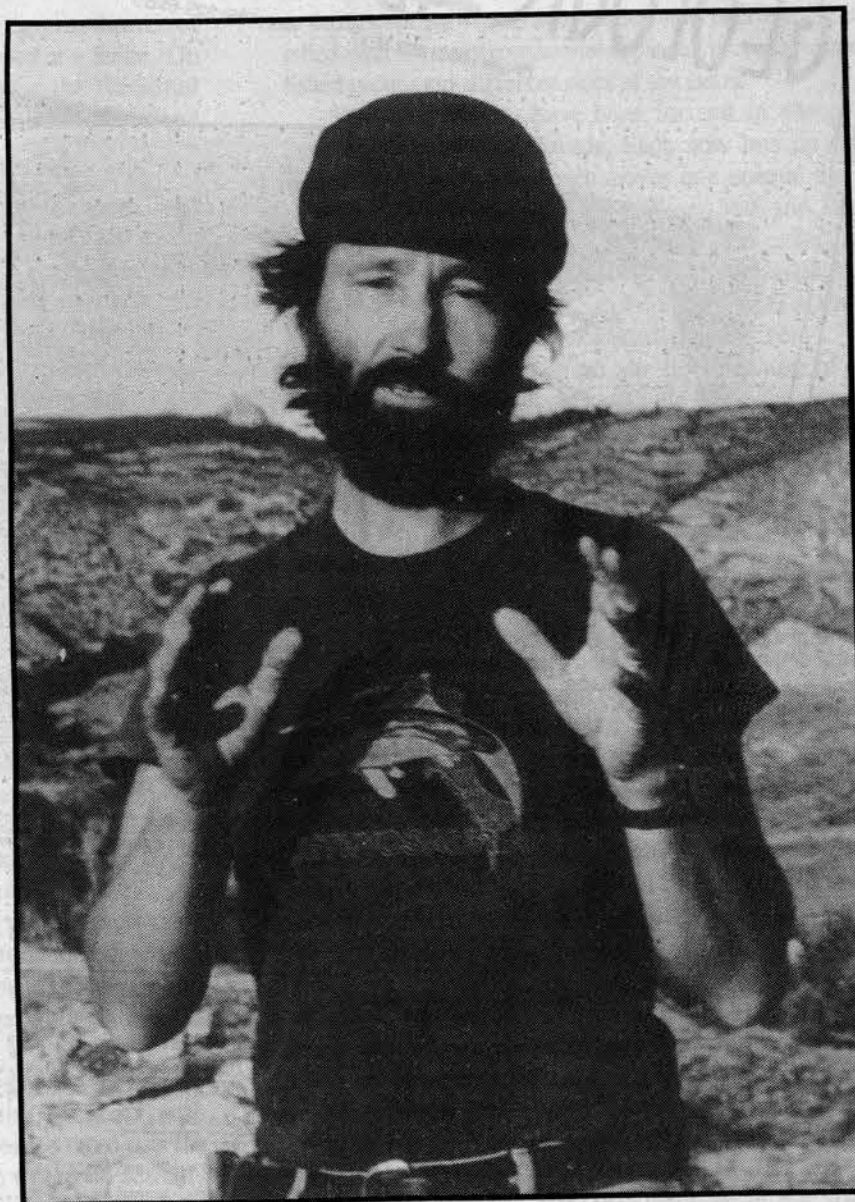
Dinosaur scholars hailed the find as spectacular, but criticized the private digger, H.J. "Kirby" Siber. BLM agents called in teams from Montana State University to finish the excavation; the dinosaur will go to the Museum of the Rockies there.

Siber, one of the most respected fossil dealers in the world, notes the creature would never have been found if he had not been looking. If he were only interested in money, he adds, he would not employ scientists in a dinosaur museum he just opened in Switzerland — one he notes with some satisfaction is not tax-funded.

In 1990, Siber arranged with the government of Peru to build a museum there in exchange for the right to excavate prehistoric whale fossils, including a new species named for him. That museum, located along the Pan American Highway, is now a prime tourist attraction.

"We have shown that fossil-finding can make it on its own, without public money," says Siber. "We should focus on the idea that the more people looking for fossils, the more we find and the more facts we uncover."

— M.M.



Pat Dawson

Fossil dealer Kirby Siber



Free Sue!

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Bumper sticker

Battle for the bones ...

(Continued from previous page)

mammoths known disappeared from Utah's Arches National Park. And Leiggi recalls returning to promising fossil sites to find them pocked with potholes.

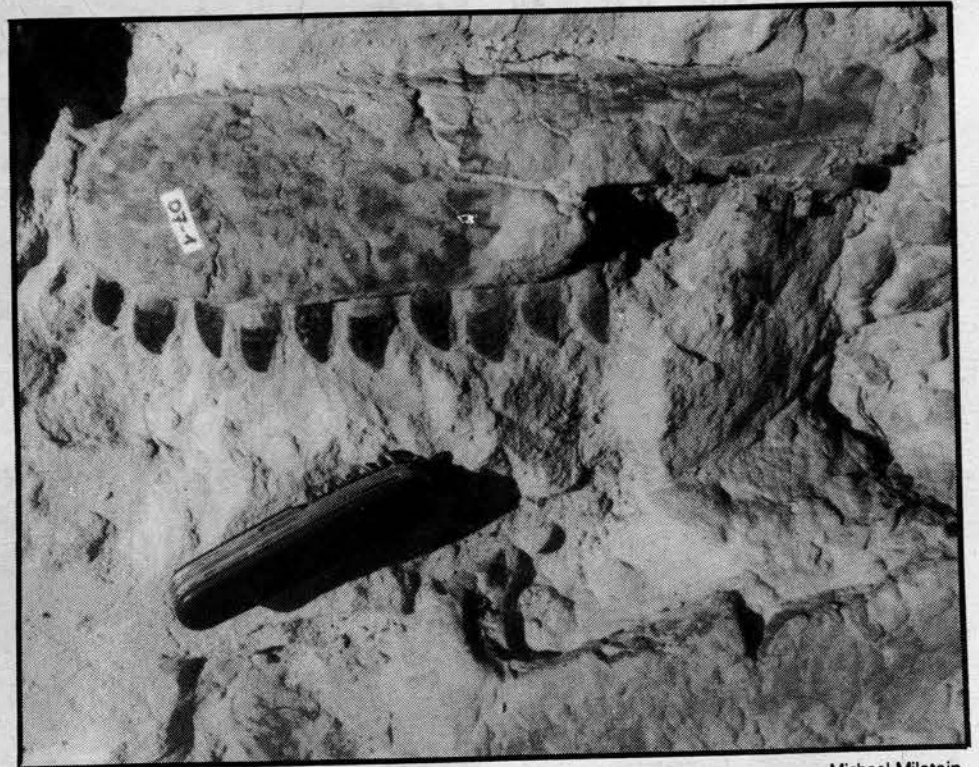
To build public support for commercial fossil digs, Dinamation International Society, an offshoot of a firm that makes robotic dinosaurs, takes paying customers, mostly teachers and college students, on fossil digs. Its teams have found new creatures, including a sickle-clawed dinosaur that may be the most vicious ever seen. The non-profit group has also joined with the BLM to construct trails in Colorado where tourists can see bones intact.

"We want to show people it's useful to have these things available both to the public and for study," says Dinamation paleontologist Jim Kirkland. "We're trying to build a constituency for protection of fossils, not for using them as bookends."



With increasing pressure for fossils, public lands need more protection, many non-profit scientists say. So they are pushing for the Baucus bill to solidify current policies that generally ban commercial fossil collection on public lands.

Says Ted Fremd, a paleontologist at Oregon's John Day Fossil Beds National Monument: "Most commercial collectors are good folks."



Michael Milstein

The jawbone of an allosaur, found near Shell, Wyoming, by private diggers

Most people don't steal. But you still need laws against it."

Under the Baucus bill, amateur rockhounds would need permits before picking up a vertebrate fossil (which does not include seashells and plants) and could only collect if they were "affiliated" with a museum or school that "has no direct or indirect affiliation with a commercial venture that" collects fossils.

Violations of the "Vertebrate Paleontological Resources Protection Act" would be punishable by a \$10,000 fine and up to one year in prison. Basically, the bill gives fossils the same protection that human artifacts — archaeological remains — have now.

But it would also require government agencies, mainly the Bureau of Land Management and U.S. Forest Service, to survey their lands for fossil resources and manage them separately from cultural remains. That means the agencies would likely have to hire paleontologists, or contract with them to examine areas for fossils, before any development proceeds.

That makes it a "welfare

act" for scientists, says collector Larson, who suggests non-profit scientists want commercial collectors banned from federal lands so they can be assured of lucrative federal digging contracts to do the kind of surveys required by the bill.

"We have shown that paleontology can succeed on its own in the free market," says Larson. "We don't get any tax money, and we're proud that we don't. You would think in this day and age others would be praising us, not trying to drive us under."

Business at Larson's Black Hills Institute is now at a standstill and the firm is swamped by the \$75,000 it has paid attorneys to "Free Sue," a cry now emblazoned on bumper stickers. It's also on a billboard on the side of the institute's Hill City building that pictures a teary-eyed tyrannosaur looking out from behind the bars of a jail cell.

If the dispute over fossil selling has led scientists who normally dig in dirt to throw it at each other, it has also drawn many others into the fray.

South Dakota's governor said he was "mad as hell" the National Guard joined in U.S. Attorney Schieffer's raid without telling him.

A Rapid City newspaper poll found 76 percent of local residents think Sue, whose skull was about to be shipped to NASA to be CAT-scanned for a study of dinosaur anatomy, should be returned.

Sympathetic diggers found a triceratops in Wyoming that had been feasted on by a hungry tyrannosaur. They named it Kevin. "We've got a dinosaur that was trashed by tyrannosaur," they said. "We hope that Mr. Schieffer eventually meets a similar fate."

Black Hills Institute lawyers are still trying to get the dinosaur back. While it may all seem amusing, says Terry Wentz, a researcher who spent several tedious months freeing Sue's skull from the rock that covered it, "It's not that funny when your friends are threatened with jail."

Meanwhile, fossils continue to grow in popularity. Tom Demere, chairman of paleontology at the San Diego Natural History Museum, says he now has a hard time convincing people to donate fossils. "They want to sell them," he says.

But in the remarkable millions of years dinosaurs ruled the planet, even a few years or centuries of bickering over their bones is little more than a punctuation mark in the history ledger. For Sue, Judge Battey noted, "a court resolution, although lengthy, will only constitute a blip on the scene."



Michael Milstein reports for the *Billings Gazette* from Cody, Wyoming.

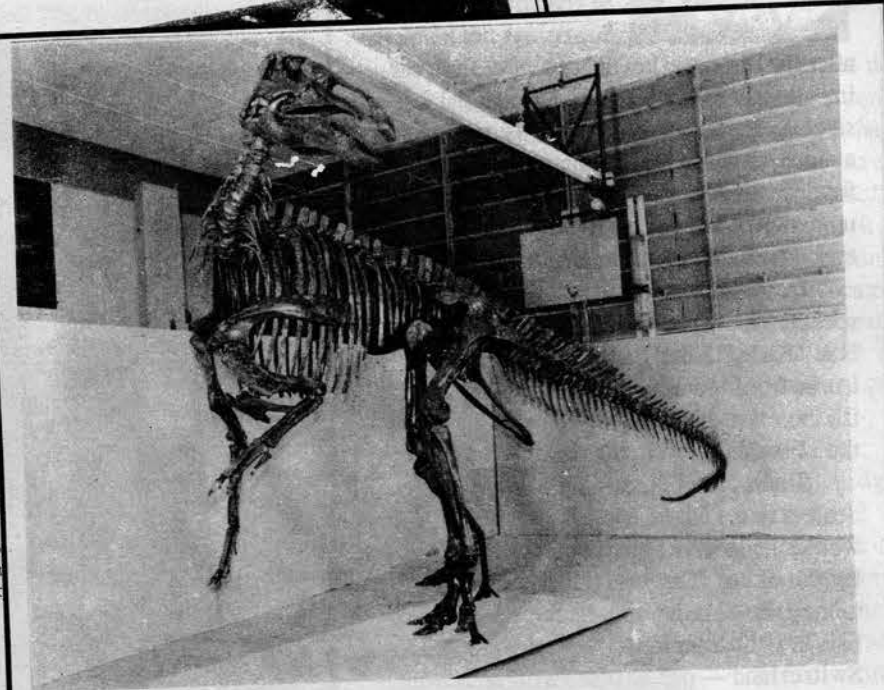
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3/8" tail vertebrae.....	\$8		
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Bulletin No. 44

Geological Enterprises' bone catalog

ESSAY

A diverse group attacks a polarized issue

by Dan Dagget

On their hands and knees, an oddly appointed group inspected Dwight Cooper's ranch in Arizona recently.

They counted perennial plants and wildlife sign. They analyzed soil conditions on random transects selected by the toss of a dart. Cooper showed them an area, now in the Tonto National Monument east of Phoenix, which hadn't been grazed since his father's cattle were removed from it over 80 years ago. He maintained that the range grazed under his management was in better condition than the land that had been rested for over three-quarters of a century.

Some in the group looked skeptical. The gathering that day included Cooper and a couple of neighboring ranchers, plus agency people from the Forest Service, Soil Conservation Service and the Arizona Department of Environmental Quality. Several urban environmentalists came from as far away as Flagstaff. All are part of a loose-knit association known as "6-6."

Bobby Holaday, a retired systems analyst and environmental activist, created the group in 1989 by inviting six ranchers and six environmentalists to her home in Phoenix. Arizona was in the midst of a pitched battle between pro- and anti-grazing forces over efforts to repeal a state law that gave ranchers free rein to kill mountain lions and black bears. The controversy was mired in the smoke-filled rooms of the Arizona legislature and the debate was more acrimonious every day.

Holaday's way of dealing with the impasse was to bring the two sides face to face.

"I figured we were never going to agree, but at least we could talk to each other. Nothing was being solved the other way," she said. She first broached the idea to Tommie Martin, a friend who had been executive director of the Arizona Cattlegrowers and an associate director for Alan Savory's International Center for Holistic Range Management. Martin was now a free-lance conflict resolution consultant. Holaday proposed inviting six outspoken environmentalists if Martin would come up with an equal number of ranchers.

Getting the environmentalists to show up was relatively easy. Among them was Steve Johnson, a strong critic of public-lands grazing and at the time Southwest representative for Defenders of Wildlife. Three Sierra Club members signed on, including Paul Pierce of the Grand Canyon Chapter, Jerry Nelson, who owns and rents out a farm in Iowa, and myself. Dale Turner, another Sierra Club member and a staffer for the *Earth First! Journal*, turned down the invitation. He said he was so opposed to grazing on public lands that he wouldn't be able to offer anything positive.

Martin, on the other hand, had considerable difficulty rounding up six ranchers. "I called 60, got eight to say they'd come, and five to show up," she said. Among those who did show up was Jack Metzger, a prominent member of the Arizona Cattlegrower's Association and soon to become that organization's president.

The first gathering in Bobby Holaday's carport at the base of South Mountain was a cautious one. Martin was facilitator because of a background in conflict resolution. She got everyone to agree to a set of guidelines: Everyone would speak as individuals and not as representatives of any group; they also agreed not to impose a group identity on anyone else, to listen and not plan their next speech while others were talking and not to use statements attributed to "they say" or "everybody knows." Those present also agreed that they would all be active participants with no one sitting on the sidelines. Bobby Holaday added one more condition that was simple but effective in creating a group atmosphere — that everyone share a potluck lunch.

Most of the ranchers who came to that initial get-together were practitioners, to varying degrees, of Allan Savory's Holistic Range Management (HRM) methods. The fact that they were the ones to show up may have had something to do with the fact that HRM ranchers are already viewed as oddballs by some of their peers. They ran less risk, perhaps, of being stigmatized by meeting with a group that included Sierra Club and Earth First! members.

The HRM presence was probably responsible for insuring that 6-6 didn't end the day it began. When the environmentalists at that first meeting said that cattle ranching had wreaked environmental havoc on the

West, ranchers stunned the environmentalists by agreeing.

"You're right," they all said in one form or another. "Grazing has made a mess of the West and we need to take drastic measures to fix it up. We just disagree with you on what those measures are." Then they said, "And we'd like to take you out on the land and show you what we mean."

Restoring the land, in HRM terms, usually involves "animal impact," i.e., intensive grazing alternating with long periods of rest. In some ways, this involves nothing more exotic than the techniques

many of us apply to our yards and gardens every year. Animals (livestock) are the "tool," to use HRM jargon, that tills the rangeland soil, scatters the seeds and applies the fertilizer (dung and urine). This works, the theory goes, because over the ages cattle have developed a symbiosis with grasses much in the same way environmentalists like to say wolves have with deer. Presented by a bunch of ranchers seeking to preserve their hold on public lands, this sounded highly suspect.

But the idea that discussing rangelands ought to be done on the range, not in a carport, was too logical a suggestion to pass up. Meetings moved out to the ranches and the list of those attending from both sides grew. The effect was dramatic. Rangeland that had been easy to describe as either totally overgrazed or resting proved much more complex.

On a field trip to the sprawling grasslands of southeastern Arizona, the group stopped at a fence. On one side stretched a ranch owned by the National Audubon Society; on the other was an old Spanish land grant, called the Babocomari Ranch.

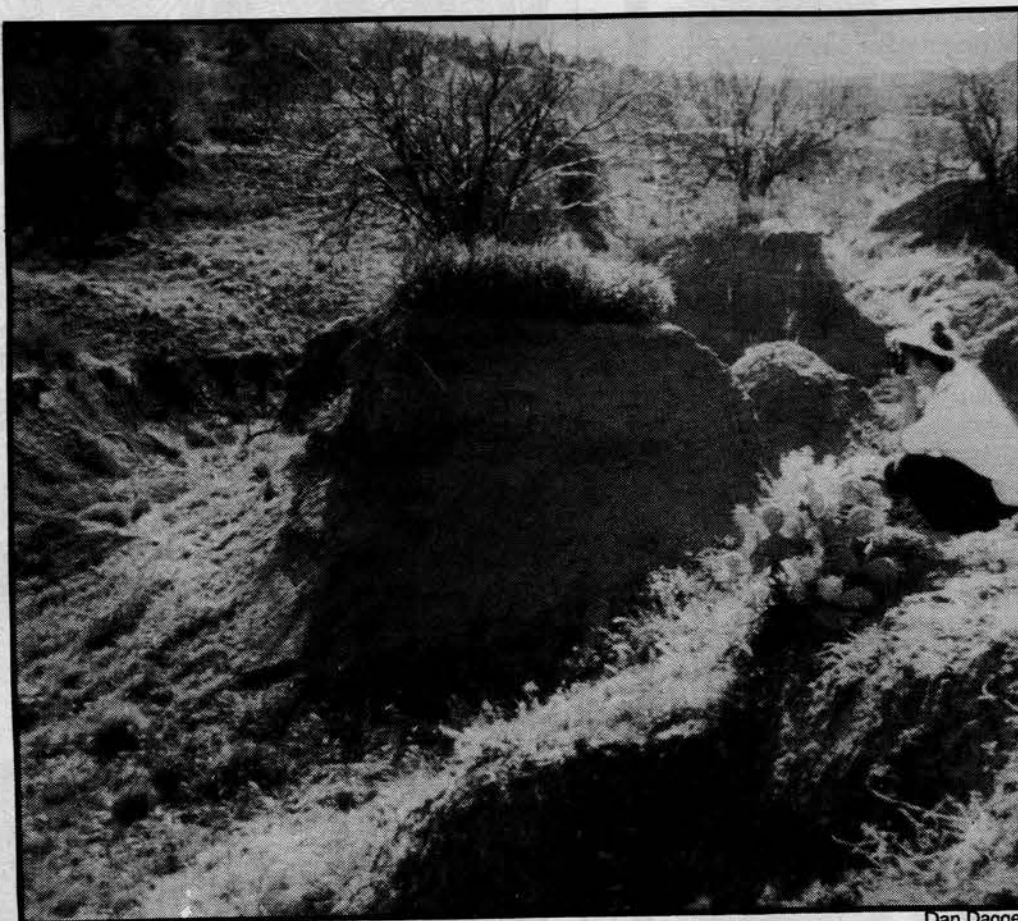
The Audubon side of the fence hadn't been grazed by livestock in over 20 years. The Babocomari side had been heavily grazed for well over a century. On the rolling hills of the Audubon Ranch tall golden grass waved luxuriously in the breeze. On the Babocomari side, a thin green carpet barely covered the hillsides.

We walked to the tall grass first. At the suggestion of Ruken Jelk, a rancher from Patagonia, Ariz., who was leading the trip, we grabbed a handful of grass and pulled. A puff of dust flashed in the sun as most of the long grass blades shattered in our hands. The roots pulled free of the soil with almost no resistance. Suddenly, we were holding a dead plant. As we looked across the landscape that moments ago had seemed so lush, it became apparent that the grass we were seeing had grown last year, or the year before, and that many of the plants were dead or dying.

On the Babocomari side of the fence, grass was short. But it covered most of the ground, and it was alive.

Making discoveries such as that has gained 6-6 members the reputation of being brainwashed by Savory zealots. Lynn Jacobs, who has never attended a 6-6 meeting, described it in such terms in his book, *Waste of the West*. Most 6-6ers, however, will tell you that their commitment to environmentalism is stronger, rather than weaker, for the experience of dealing with the diversity of opinions they encounter at these outings.

Earth First!er Mike Seidman, a caretaker at the Phoenix Zoo who has become a 6-6 regular, said he enjoys the meetings even though he disagrees with much that is said. "I come here because these are the only environmental meetings I go to where we actually talk about the environment," he said. Seidman and others now watch both sides of fence lines as they drive



Dan Dagget

This arroyo started out as a cow path 100 years ago

through Arizona's grasslands. Now they stop, get out, look and take photographs. And now they read more than ever about grasslands and grazing.

Another criticism of 6-6 is that it hasn't been "productive." Although the group recently set a goal of becoming associated with a ranch as a management team, in over three years all its members have done is get together and talk. To Bobby Holaday, that in itself justifies the time and effort she has spent. "If all we do is bring people of such different values together by making an atmosphere where they can communicate, it's worth it."

To Tommie Martin, the best measure of the 6-6 group's success may be that its non-confrontational approach is gathering momentum and beginning to spread. Martin, who travels the West spreading her message of teamwork, says a number of groups similar to 6-6 are springing up as more activists become dissatisfied with the confrontational approach taken by established groups on different sides of the issue.

She says groups have been formed in Oregon, Idaho, Colorado and Nevada. Each now has its own character, she says, and each moves in a unique direction. For instance, the Toiyabe Watershed and Wetlands Management Group, for which Martin is facilitator, recently signed a memorandum of understanding with the U.S. Forest Service to manage 90,000 acres of the Reese River Valley south of Austin, Nev. The group was given the go-ahead, she says, because of the success of its first three years with the land.

"We've reduced the amount of bare ground by 80 percent," she said. "The meadows are coming back and we're the greenest ranch there in spite of the fact that the area is in the middle of a terrible drought."

At the spring 6-6 get-together at the Date Creek Ranch in central Arizona, those coming together included members of The Nature Conservancy, biologists from the Arizona Riparian Council, a commissioner from the state's game and fish department and Karan English, a state senator and candidate for the Congress. All were on hand to take a look at the results of Phil Knight's efforts to rehabilitate a riparian area on his ranch. His work has apparently been successful. When photos of Date Creek taken two months after it had been grazed were mixed with photos of The Nature Conservancy's nearby Hassayampa Preserve, even the preserve manager couldn't tell which was which.

After the field trip, back at the ranch house for the potluck lunch, Eva Patton of the Arizona Nature Conservancy, her first meeting, gave a vote of confidence to the 6-6 concept. "I think groups like this are the best hope we have on this issue." ■

Dan Dagget has been organizing and leading environmental groups for 20 years. This year he was honored as one of the top 100 grass-roots activists in the Sierra Club as part of that group's centennial celebration.

BULLETIN BOARD

HAPPY ANNIVERSARY

The Wyoming Outdoor Council will celebrate its 25th birthday this year at an annual conference in Lander Oct. 10. A concert and dance kick off the weekend, which features writer William Kittredge giving a keynote address. Wyoming's Secretary of State Kathy Karpan will also talk at the get-together, which includes field trips and workshops. Contact the Wyoming Outdoor Council at 201 Main, Lander, WY 82520 (307)332-7031.

ETHICS FOR THE NEW WEST

A conference aiming for eclectic perspectives on environmental concerns will be held Oct. 16-18 at the Scandinavian Lodge in Steamboat Springs, Colo. "Ethics for the New West" is an interdisciplinary gathering of people in the humanities, and natural and social sciences, sponsored by Environment 2000, a new non-profit environmental group. Charles Wilkinson, Colorado University's Moses Laskey Law Professor, is the featured speaker, Madonna Blue Horse Beard will tell of the Lakota people's view of human relationships with the earth, and Hunter Lovins of the Rocky Mountain Institute will speak on "How not to parachute more cats." Other presenters include Marty Zeller of Denver's Design Workshop, Colorado State University sociologist Diane Mitsch Bush, and Hal Salwasser of the U.S. Forest Service. For more information contact Environment 2000, P.O. Box 774822, Steamboat Springs, CO 80477 (303/870-7575).



WHICH ROW TO HOE?

The Minnesota-based Northwest Area Foundation has released a report examining sustainable agriculture at a commercial level. *Which Row to Hoe* documents how some farmers have benefited from alternative farming methods. The free report also includes descriptions of the sacrifices as well as profits farmers may experience. Readers learn how Vic Madsen reduced expenses of pesticides and fertilizer by 50 percent in four seasons, and how he expects to decrease his off-farm expenses 70 percent in the next 10 years. The report also surveys "new" agriculture's influence on cropping patterns, farm inputs and yields and community interactions in the Midwest and Northwest. In Lewiston, Minn., where farmers are reducing their use of chemicals, the local economy has not been injured. "Farming is always changing, but everybody always needs tools," says Dave Benson, whose Lewiston feed and fertilizer stores are selling more equipment in lieu of chemicals. To receive *Which Row to Hoe* or a list of other foundation reports, contact the Northwest Area Foundation, 332 Minnesota Street, Suite E-1201, St. Paul, MN 55101-1373 (612/224-9635).

— Mark Dooley

THE GREENING OF BUSINESS

Green business is the topic of a seminar Oct. 9-11 in Prescott, Ariz., sponsored by the college's Common Ground Project. "Fifty years from now, any business, any position that is not environmentally sound, will be obsolescent, maybe all the way to obsolete and gone," says Prescott College President Doug North. Amory Lovins, co-founder of the Rocky Mountain Institute in Old Snowmass, Colo., will open the "Environmental Entrepreneurship" conference by offering 20 ways to increase profits through immediately available technology. Most of the 35 workshops and presentations will be led by business people set to tell how they make a buck without harming the environment. The weekend concludes with recommendations for the greening of business curricula at universities. For more information, call Jim Stuckey or Derk Janssen at 602/778-2090, or write to Common Ground, 220 Grove Ave., Prescott, AZ 86301.

RENDEZVOUS AND POWWOW

The first River Rendezvous and Salmon Powwow, co-sponsored by the Central Oregon Environmental Center and Confederated Tribes of Warm Springs, takes place on the Warm Springs Indian Reservation, Sept. 25-27. Ceremonies begin with the Warm Springs Dancers and Drummers, and the weekend includes field trips to sacred and traditional sites. The event features more than 20 speakers focusing on the Native American perspective of the salmon issue. The expected audience of 300 will hear from native elders, resource managers and environmentalists, and included in Saturday's program is a traditional salmon bake and storytelling. For details call the Central Oregon Environmental Center, 16 NW Kansas St., Bend, OR 97701 (503/385-6908).



WHAT REGROWTH?

A report released in June by Rep. George Miller, D-Calif., turned up timber accounting and management problems on 16 forests in the Pacific Northwest and California. The report charges the U.S. Forest Service made overly optimistic regrowth projections, inflated timber inventories and failed to revegetate adequately. "This report shows that in spite of repeated assurances by the Forest Service, the forests we've cut down are not growing back," said Miller. "The Forest Service does not check whether new saplings are growing after they are three years old, they do not check forest inventories against actual on-the-ground surveys and they have not stopped cutting in forest areas that they know will not grow back," he added. The report, prepared by Miller's Committee on Interior and Insular Affairs, compares BLM and Forest Service management practices to those of the savings and loan industry, in which trustees placed capital at risk to maximize short-term profit. For a copy, contact the Committee on Interior and Insular Affairs, U.S. House of Representatives, Washington, DC 20515, or phone Daniel Weiss, 202/225-2095.

WILD ROCKIES RENDEZVOUS

The Missoula, Mont.-based Alliance for the Wild Rockies is sponsoring its seventh annual Wild Rockies Rendezvous. This year's festivities, expected to draw up to 300 participants, are set for Oct. 2-4 in Missoula. Staffer Dan Funsch says the program has a "roll up your sleeves and get dirty" feel. Peter Bahouth, former director of Greenpeace USA, is keynote speaker. Others include representatives of several Native American tribes. Bill Marlett of the Oregon High Desert Protection Association will facilitate workshops on sacred lands, treaty rights and wilderness issues. Registration is \$15 at the event and \$10 before Sept. 25. For details contact Dan Funsch, Alliance for the Wild Rockies, Box 8731, Missoula, MT 59807 (406/721-5420).

AN ENDANGERED SPECIES FAIR

An Endangered Species Fair with music, displays and talks is set for Sept. 26 in Santa Fe, N.M. Speakers include Sam Hitt, director of Forest Guardians, and Claire Tyrpak, director of New Mexico's Share With Wildlife program, who will focus on threatened and endangered species of the Southwest as well as attempts in Congress to weaken the Endangered Species Act. The Rio Grande chapter of the Sierra Club, Forest Guardians and Share With Wildlife are sponsors of the event. Writer and ecologist George Wuerthner will deliver the keynote address and present a slide show in the evening at the Randall Davey Audubon Center. For more information, call Patricia Wolff, 505/988-9126.

WISE USE OR LAND ABUSE?

The Colorado Environmental Coalition's Annual Retreat this year focuses on the wise use movement, which has successfully borrowed some tactics from environmentalists. The retreat is scheduled for Oct. 2-4 at the Buena Vista Community Center in Buena Vista, Colo. Featured speaker Darrell Knuffke, regional director for The Wilderness Society, will discuss the wise use agenda and the environmental campaign that has sprung up in opposition. The schedule also includes environmental education, guided hikes, field tours, food and entertainment. Registration for "The Wise Guys: Wise Use or Land Abuse" is \$30 to the CEC Retreat, Colorado Environmental Coalition, 777 Grant St., Suite 606, Denver, CO 80203-3518.

ECOLOGICAL AND SOCIOLOGICAL INTEGRITY

The Clean Water Act attempts to keep water clean by limiting how much pollution can be in a stream or lake. However, this parts-per-million approach has proven difficult to implement. As a result, a bill now before Congress to reauthorize the act introduces the term "ecological integrity of watersheds." Does that mean dams must be removed and irrigation canals blocked up? Or does it mean the present system must stay, but be operated with sensitivity to the river basin's ecosystems? To answer these general questions and to address issues

specific to the South Platte River basin, a conference will be held Oct. 27-28 at Fort Collins, Colo., titled "Defining Ecological and Sociological Integrity for the South Platte River Basin." Registration is \$60. For information, write the Colorado Water Resources Research Institute, 410 University Services Bldg., Colorado State University, Fort Collins, CO 80523; or call 303/491-6308.



OTHER VOICES

Indian land claims deserve our support

by Kay Matthews

The presence of the 24,000-acre Pueblo of Sandia prevents the city of Albuquerque from sprawling into the nearby foothills to the south. Nevertheless, the environmental community in northern New Mexico is fighting the tribe's attempt to reclaim its land from the U.S. Forest Service.

The claim is a result of an 1859 land survey, which improperly deleted 9,000 acres of the Sandia Mountains from a Spanish land grant. This land grant, without the 9,000 acres, was later given to the pueblo. Most of the 9,000 acres in question now belongs to the Forest Service, but the pueblo wants it back, a demand that angers the National Wildlife Federation, The Wilderness Society and other local groups.

All too often, this is the scenario in Indian land claims. Many years ago, these same environmental groups opposed one of the hardest fought Indian battles, waged by the Taos Pueblo in northern New Mexico for its sacred Blue Lake. When the lake was appropriated by the Forest Service as part of Carson National Forest in 1906, the pueblo lost its most sacred shrine, site of numerous religious rituals. Although the Forest Service allowed the Indians special use of the lake, the pueblo fought persistently for its reacquisition. Finally in 1970, Congress passed a bill recognizing the pueblo's claim to the lake and 48,000 surrounding acres. Since then, the area has been zealously protected by the Taos Pueblo, off-limits to the general public and even to those from the pueblo not specifically sanctioned.

This off-limits status, more than anything, is what seems to have raised the ire of conservation groups then and now. Viola Miller, chairwoman of the Albuquerque Open Space Task Force, expressed the environmentalists' sentiments when she said, "If we lose this Forest Service land and this wilderness area land, we basically will not have control of its future use for generations and years to come."

Clifford Mendel, Albuquerque Wildlife Federation president, said, "The transfer will spell the development of the 19 percent of the Sandia Wilderness claimed by the pueblo." These are the same voices that have been shouting for years, in appeals and lawsuits, that the Forest Service has capitulated to development interests.

In contrast to the Forest Service, the pueblo has long been an ally — spiritually as well as financially — to those of us who have fought to preserve these mountains from various threats: more housing developments, inadequate wilderness protection, increased traffic and congestion, and the potential destruction of a unique riparian area in Las Huertas Canyon. The pueblo was party to a forest plan appeal, underwrote the appeal of the Las Huertas Canyon Environmental

source of well-being. The integrity of our community and our political system and the maintenance and transmission of our cultural identity depend on that relationship."

In the spirit of compromise, the pueblo has deleted private inholdings from its claim and assured the public that access to the various picnic grounds, trails and Sandia Mountains Wilderness within the claim will be granted. I'd gladly accept more restricted access to these mountain areas I love to roam because I know the pueblo values the mountains — their waters, wildlife, trees and wildness — in a way the Forest Service will never comprehend, much less manage. And in a political sense, I feel any aboriginal land claim, be it 9,000 acres or 50,000, must be recognized as compensation for the unjustifiable abrogation of this country's treaties with Indian peoples.

After the signing of Taos Pueblo's precedent-setting claim, the federal government seemed ready to assume the role of Indian advocate with the passage of a self-determination initiative that opened the door for millions of acres to be returned to Indians. The Pueblo of Sandia's land claim, however, has languished in the labyrinth of the Department of the Interior for five years now. While a decision against the pueblo was rendered by Interior in 1989, a delegation from the pueblo recently returned from Washington after resubmitting the claim. Once again it is under review.

The pueblo has been reluctant to involve New Mexico's congressional delegation in the Department of Interior's review. As tribal administrator Malcolm Montoya has pointed out, "Our claim, unlike that of the Taos Pueblo people, affects a mountain range that is adjacent to a huge population that uses that land extensively. It's not a popular issue."

Mountains like the Sandias, so near our urban areas, are the last refuge of animal and plant populations hemmed in by concrete and asphalt. The Forest Service is standing in the wings ready to develop what the city sees as its playground.

The Pueblo of Sandia has stated, "Our commitment is to keep the mountain land in a natural, unspoiled state. The intent of the federal government seems to be the opposite." It is quite clear in whose camp environmentalists belong, and by not supporting Indian land claims, like that of the Pueblo of Sandia, we are failing in our own commitment to protect these forest lands. ■

Kay Matthews lives in Las Placitas, New Mexico.



Ancient Pueblo design

Impact Statement, and is one of six members of a Las Huertas Canyon lawsuit.

To my mind, environmental groups should support Indian land claims as the ultimate means of preserving, with or without public access, our dwindling forest lands. Taos Pueblo has maintained Blue Lake and its surrounding forest lands in as pristine condition as we will ever know them.

The Pueblo of Sandia government has stated: "The Sandia Mountain is sacred to the people of the Pueblo of Sandia. The mountain is our church, our protector, and our

LETTERS

SOME OBSERVATIONS ABOUT BEAVER

Dear HCN,

The front page article concerning beavers (HCN, 8/24/92) was generally right on, but leaves one thinking that beavers are a panacea for restoring riparian areas. For some streams, beaver can be useful, for others beaver will be inappropriate. Having spent several years researching riparian areas in the Great Basin, I have a few observations.

In general, the late summer base flow is higher below a system of dams than in streams without dams. But this observation holds only for beaver dams built on streams with a wide valley bottom where the area inundated is large and there is a lot of alluvial soil to store the water. In narrow canyons, storage behind dams is small and the effect on base flow is minimal. Total annual flow is probably less due to increased evaporation, but the increase is lost during the spring runoff due to lack of storage. In my experience, beaver dams add only about 10 percent additional surface area, so the increased evaporation is minimal ...

In steep, narrow canyons, beaver dams tend to be more unstable. Floods can remove them easier and the debris may increase scour farther downstream. Narrow riparian areas have fewer trees, therefore less food for the beavers who

tend to abandon dams, adding to their instability. Most abandoned dams which I have seen are in narrow valleys with highly confined streams.

I have spoken with ranchers who claim that beavers are responsible for most of the downcutting on their ranch due to washouts. But except for debris problems mentioned above, the additional water added to a flood is minimal. Consider a potential flood generated on a small, steep watershed of 5,000 acres. One inch of runoff over 24 hours would be a huge flood with 417 acre-feet of water. Most beaver dam complexes I have seen are less than five acres and if the average depth is five feet (an exaggeration), only 25 acre-feet would be added to the flood. The most damage would come if the dam burst instantaneously, but the construction makes me believe that failure would take several hours, therefore the effect on the flood flow would be minimal. (Has anyone ever witnessed a beaver dam break? If so, I'd like to read a description in HCN.)

It is true that the released sediment from a breached dam could smother spawning beds, but consider the years of improved spawning due to the capture of sediment in the dams. Also, I have seen many downcut streams in wide valleys that are recovering and formerly raw, eroding banks are now quite stable. Good examples in Nevada are the Quinn and Reese rivers.

In summary, I offer a few guidelines

for the use of beavers in riparian restoration work.

1. Never introduce beaver into areas where they were not native. This is especially important where there are native salmonids (probably now endangered) that did not evolve in the presence of beaver dams. Spawning travel could be impeded.
2. Never introduce beaver into steep, high, confined streams. They will quickly eat themselves out of existence and will move elsewhere.
3. Introduce beaver (or allow natural establishment) a few at a time into areas with former meadows that are now moderately confined with an adequate food supply. As mentioned in your article, benefits may be immense.

Thomas J. Myers
Reno, Nevada

THE BLM APPRECIATES CRITICISM. NOT.

Dear HCN,

I was absolutely incredulous to read the broad-minded proclamation by H. James Fox, chief of the BLM's rangelands resources, concerning the safe, comfortable work atmosphere inside the Bureau of Land Management (HCN, 8/24/92). It may be possible that, in the rarified atmosphere of line "managerhood" Mr. Fox moves in, one can be resolutely candid with one's

best professional opinion. In the real world beyond the Beltway, the bureaucratic atmospherics more closely resemble those of Hurricane Andrew.

As a survivalist inside a federal land management agency, I and large numbers of my peers quickly learned that one's professional opinion is welcome when it supports the status quo. But if it significantly challenges the direction from on high, watch out! Folks who consistently stick to their science when such conclusions conflict with the agency's chosen course often have about as much respect as homeowners who chose to ride out the storm in their beach-front houses.

This is not to say that a significant percentage of land-management agency employees fail to fight the good fight. But either Mr. Fox had a somewhat sheltered (and meteoric) ride up the BLM's career ladder, or he has suffered a case of selective Foggy Bottom-induced memory loss.

I hope a time comes when Mr. Fox's "constructive debate and involvement of concerned people" actually results in improved land management programs. But if I may paraphrase the chief: We are not well served by managers who lack enough professionalism and moral courage to listen to honest recommendations.

Yours for cows in all the "right places."

Woody Hesselbarth
Grangeville, Idaho

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A coy, cautious courtship in the woods

by Peter Stekel

E

verybody wants to see wildlife. Unfortunately, few have the patience to sit and wait, because that is what it takes. No skill involved.

I have a friend who planted a seed in my mind after he said a major goal of his was to stalk a deer, then touch it. After deer, mountain sheep, elk, wolves; the possibilities are endless.

On a few occasions, half-heartedly, I've tried. Deer are wary creatures and I am impatient. When I get too close, they wander off a step or so. They always maintain the same safe distance.

In studying aikido, a martial art, students practice balance, coordination and presence by training in the dark. I learned that there is an innately known distance between people that will not be violated. It is equivalent to the length of your outstretched arm and your partner's. No matter who I trained with, the moment they entered my "inner sphere," I knew it and moved to maintain this distance.

It was the same with deer I tried to sneak up on; they always maintained this sphere of space within which I was not allowed.

Then I learned a technique from Les Chow, a wildlife biologist with the National Park Service, for approaching large mammals. It's called "looking for your wallet." The procedure is simple and it works pretty well.

In a random pattern, head down, eyes on the ground, you wander towards the animals, as if "looking for your wallet." Deer, or mountain sheep, will note your presence but seem to assume you're browsing and let you approach closer.

er than when stalking. It seems to have something to do with eye contact. Predators make eye contact.

I've tried this technique and it worked for me. I've yet to touch a deer but I came close to it last summer. But strangely, the closer my approach, the stronger my desire to move away.

I walked into my campsite in Sequoia National Park one day to find two deer licking the coals from the barbecue. The campground was nearly empty and deathly silent.

The deer didn't notice me at first. I walked methodically, but silently, towards them. I was within 30 feet when one, a male, looked up at me. I stopped. We stared at each other until I remembered; I began to search the ground for my "wallet." Soon, the male looked away and went back to licking the coals, probably rich with salt.

The other deer was a female. She moved up to the male; they rubbed noses and "kissed." The female ran her tongue over the nose of the male licking charcoal dust. Both their tails twitched at clouds of insects. Their big ears scanned for sounds like radar dishes.

The closer I got, moving in inches now, the more individual characteristics there were to see.

The male had a black blotch on his lower lip, the kind you've seen in certain breeds of dogs. The female had a sparse covering of whiskers on her chin. I estimated we were about 10 feet apart. Close enough.

Slowly I sank to the ground and sat on my heels. Let them come to me, and then ...

To my left I heard the crack of a broken twig. "Whiskers" looked anxiously at the sound and relaxed; it was two more deer come to graze. They were both female and comparing them to Whiskers it was plain she was pregnant. Her belly hung low and was well rounded.

The two new arrivals sampled the coals.

"Black Lip" moved in and pushed them aside by kicking at them with his foreleg. Still on my heels I moved, irresistibly, closer.

I was beginning to feel part of the group; my presence didn't seem to concern them at all.

The deer seemed larger than life, but, paradoxically, smaller than I expected. They actually looked larger from farther away. Maybe that is because it was easy to convince myself they were a different size. When I helped Les Chow tag bears, they always seemed tiny until the sedative wore off, and they began to move.

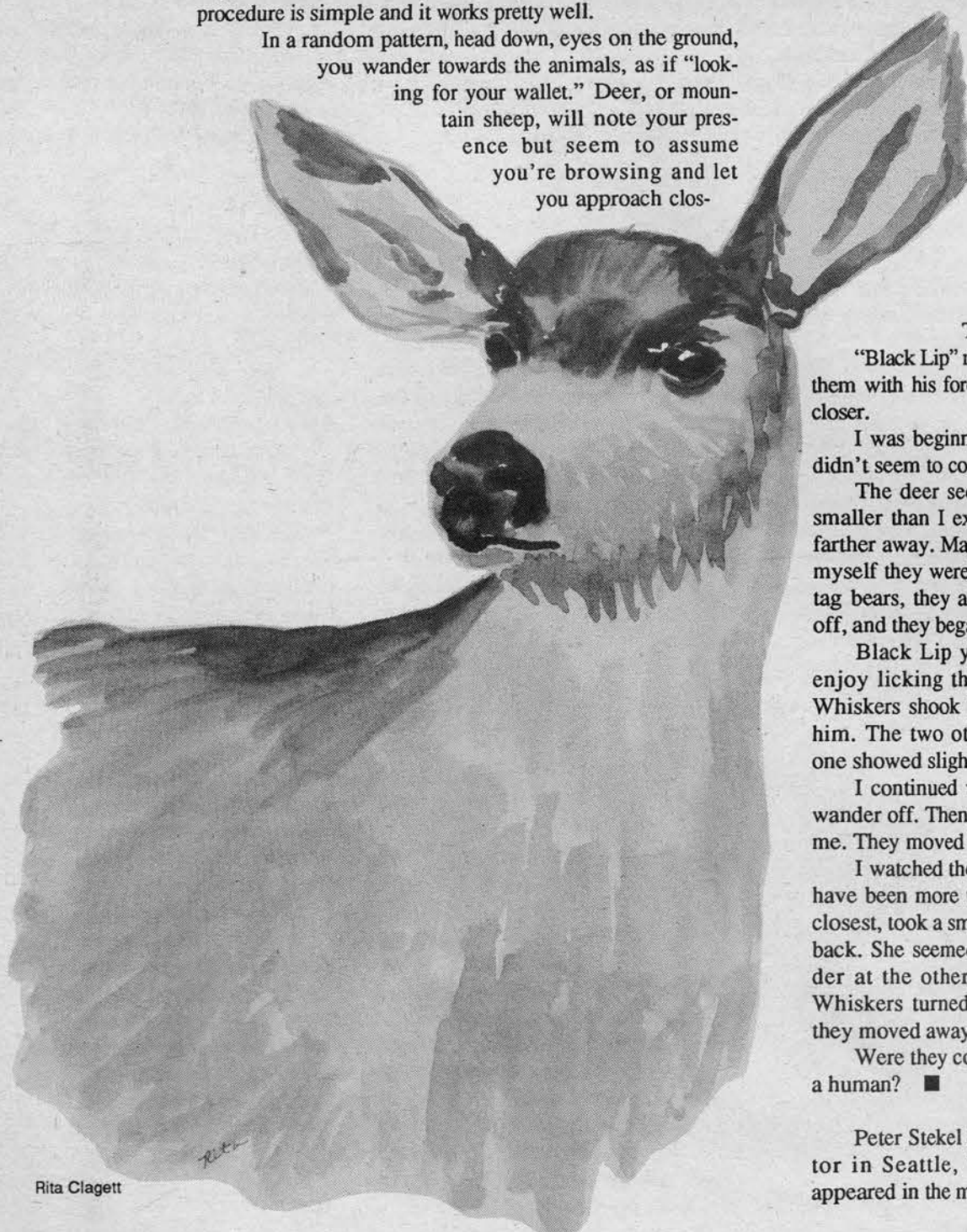
Black Lip yawned, smacked his lips and seemed to enjoy licking the coals as much as kids like ice cream. Whiskers shook her head, scratched, and moved in next to him. The two other females kept their distance, although one showed slight interest in me.

I continued watching the four deer until they began to wander off. Then, when I got up, the deer stopped to inspect me. They moved in closer.

I watched the deer watch me. In a moment, we couldn't have been more than one arm's length apart. Whiskers, the closest, took a small step towards me and I discreetly moved back. She seemed pleased and looked back over her shoulder at the others. Black Lip nodded his head slightly. Whiskers turned around and joined her friends; together they moved away.

Were they contemplating what it would be like to touch a human? ■

Peter Stekel is a writer, hiker and environmental educator in Seattle, Washington. His deer-man encounter appeared in the monthly magazine, *The Mountaineer*.



Rita Clagett