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The Environmental Biweekly of the Rockies and Great Plains

High Country News

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Lander, Wyoming

Friday, February 9, 1979

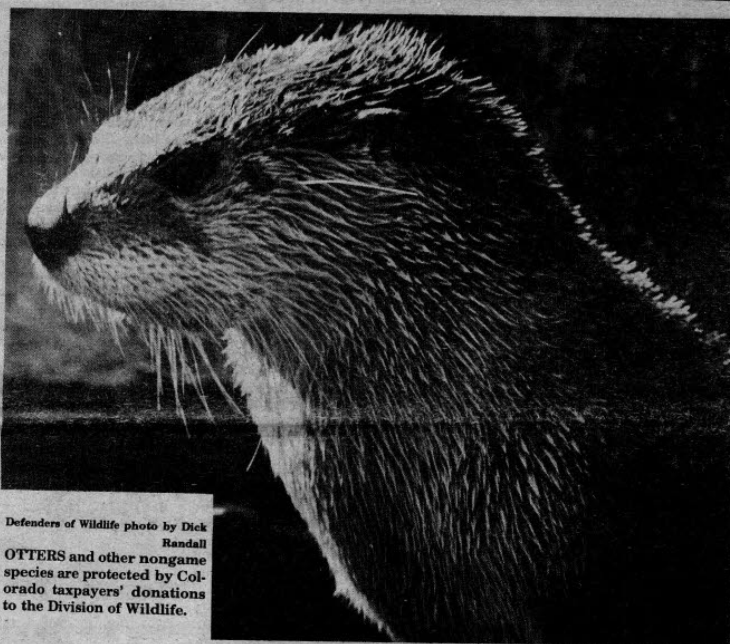
Colorado donors fear nongame double-cross

by Rodney Barker

Many people take it for granted that nongame species of wildlife are safe because they are not hunted. On the contrary, by their noncommercial nature they are predisposed to a second-class status. In some states the very term "nongame" is used as an adjective that describes park-related activities such as water skiing and picnicking, in addition to identifying various species of wildlife.

But not in Colorado, where a recent public opinion survey regarding the use of wildlife in the state revealed that more Coloradans took time to feed wildlife than to hunt. On top of that, last year when

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Defenders of Wildlife photo by Dick Randall
OTTERS and other nongame species are protected by Colorado taxpayers' donations to the Division of Wildlife.



RACHEL CARSON

Drawing by Hannah Hinchman

After Silent Spring, the issue became life itself

by Peter Wild

"Hogwash" and a "hoax" howled its critics as *Silent Spring* soared onto the best-seller lists. Admirers countered by calling the book "a real contribution to our salvation." Whatever their sentiments, those embroiled in the controversy agreed that it "was one of those rare books that have the power to move the whole nation." Its immediate effect was to help revitalize a flagging environmental movement, but the book began by reminding readers of their slowly changing natural heritage.

The process has gone on for eons: forests replace deserts, mountains heave up through forests, and oceans flood over peaks — only to be replaced again by deserts. In the brief period of his existence, man also has been an agent of change. To wrest protein from animal life, Stone Age Indians drove herds of buffalo over "jumps" or set fire to grasslands. Making room for cornfields, colonists on the Eastern seaboard flailed away at the gloomy forests

with their awkward, straight-shafted axes, oblivious to the long-term effects on what we today call "the web of life." As George Perkins Marsh pointed out, some societies went too far. They so wrenched the land for immediate gains that future generations suffered. Still, despite the abuses, human life has persisted.

Around World War II, however, other factors appeared in the equation of survival. Technological man started releasing new substances into the biosphere, lethal concoctions foreign to the ancient chemistry of the earth. In the short run they may be beneficial. But once spread they can't be recalled, and they kill indiscriminately by altering the very chemistry of the cells on which life is based. Referring to the abrupt introduction of such pollutants as strontium 90 and DDT, Rachel Carson presented the new crisis in *Silent Spring*:

"The rapidity of change and the speed with which new situations are created fol-

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HCN
Letters

PACKED WITH SNOWMOBILERS

Dear Editors:

Your January 12 issue of HCN is especially excellent — notably the articles on Congress and the environment, and the summary of RARE II.

I am really pleased that you mentioned the series of public meetings on snowmobile policy in the national parks. On behalf of the Maine Audubon Society, I spoke before the Jan. 15 meeting at Acadia National Park, and as expected, the auditorium was packed with snowmobilers, many of whom were anything but polite in their eagerness to make their views known.

Acadia is, as you mentioned, an exception to the national policy that would restrict snowmobiling to designated roadways and waterways that are open to motorized travel in the other seasons. The exception is a seven-mile stretch of the 50-mile carriage road system that is still open to snowmobiles but closed to motor vehicles in the summer.

We hope that the NPS will consider closing all of this unique road system to snowmobiles, but with the increasing strength of the snowmobile organizations in Maine, we may be fortunate to hold onto the stretches of carriage road that are designated for skiing only. It promises to be a difficult struggle.

Russell D. Butcher
Seal Harbor, Maine

COWBOY IMAGE MIFFED ME

Dear HCN,

For the most part, I found your article on the BLM (Jan. 26, 1979) fair and informative, but your constant referral to BLM range managers as cowboys and tobacco-chewers with degrees from Wyoming University really miffed me.

Number one, who else has cared for the Western grazing land? Who better understands its needs and loves it for itself? Eastern environmentalists? Please!

And where, pray tell, would you suggest people study range management; at Harvard? In Iowa? The West has the best range schools.

Also, suggesting that BLM does not have enough wildlife-oriented managers is not a good criticism. Having worked in a BLM area that was "managed for" wildlife, I saw plenty of mistakes and waste. Range needs to be managed for total ecological balance, and believe it or not, this is exactly what the University of Wyoming is teaching in its range program at a graduate and an undergraduate level.

I also urge you to understand that the HCN and the Journal for the Society of Range Management are passed around all BLM offices every month. They are informed, but your article makes it sound like there has been some major breakthrough in range management that BLM employees, because they're ill-educated cowboys, haven't heard of, and that is patently untrue. Like most sciences, this one is imperfect at best.

BLM supports an incredible amount of scientific research and wants more badly

than anyone to know what can be done to protect a way of life that is intrinsic to America.

I believe we all want the same things, protection of the environment, but please realize there are no simple answers for this arid land where men, cattle and wildlife need all exist as a community.

You'd best believe there's hope for the BLM because within those small country towns are the men and women who love and understand more about this land than anyone ever will and without their help, there truly will be no hope!

Nancy Gregory
BLM, Santa Fe, N.M.; BLM, Casper, Wyo.; Colorado Division of Parks; University of Wyoming, range and economics; member, Society of Range Management

INTERESTED IN SPECIES

Dear HCN,

I am surprised. HCN article "Researchers Seek Wolves in Montana" (p. 13, Jan. 26) fails to mention that the gray wolf is listed as endangered by the U.S. Fish and Wildlife Service. An article above the wolf article did, however, mention the "threatened" status of grizzly bears.

Please be consistent. I and other HCN readers are interested in the status of all endangered and threatened species.

I have enclosed a listing from the Fish and Wildlife Service "List of Endangered and Threatened Wildlife and Plants," Federal Register, vol. 44, no. 12, Wednesday, Jan. 17, 1979:

Sixteen endangered and threatened plants and animals are known to have or have had ranges within the Northern Rocky Mountain states. Endangered mammals are black-footed ferret, Northern swift fox, Utah prairie dog, and gray wolf. Grizzly or brown bear is threatened.

Endangered birds are whooping crane, American peregrine falcon, Arctic peregrine falcon and bald eagle. Endangered fishes are humpback chub, Kendall Warm Springs dace, Colorado River squaw fish, and roundfin. Greenback cutthroat trout is threatened.

Endangered plants are Rydberg milk-vetch and a waterleaf, *Phacelia argillacea*.

No reptiles, amphibians, mollusks, nor insects are listed as endangered or threatened in Montana, Wyoming, Idaho, Utah, or Colorado.

Karla J. Vocke
Woodridge, Ill.

ZEAL AND PERSISTENCE

Dear Editor:

I would like to supplement Peter Wild's review of Robert van den Bosch's book, *The Pesticide Conspiracy* (HCN 1-12-79) with two comments. First, Dr. van den Bosch should be given credit for his pioneering work in establishing biological pest control methods in a credible, self-sustaining program in one of the nation's most dedicated agribusiness academic institutions, the University of California.

Second, and more important, Dr. van den Bosch managed to establish his credibility by showing California farmers that chemical pest control methods were not cost-effective, compared to biological methods. Often the results were dramatic.

The economics, and van den Bosch's zeal and persistence, were the key to breaking the hold of a giant petrochemical establishment, and represent a lesson to us all.

David Hupp
Yachats, Ore.



by Hannah Hinchman

A respite in the heart of winter. The sun is more direct and powerful than it was last month. I'm traveling up the Willow Creek drainage, a broad, dry valley with an avenue of cottonwoods and willows that follows the streambed. Two sounds conspire to break the frozen stillness — my footsteps and the animated voice of water moving under ice.

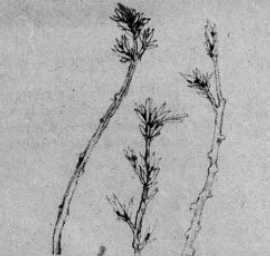
I admire the few delicate weed bones that still rattle above the snow. Their stems are as dry and polished as river pebbles. Inspecting the buds that are formed and waiting on cottonwood, alder, and buffaloberry I see no signs of change — too early. But inside the buds the rudiments of leaves and stem are already in place, packed in accordion folds. The big cottonwood buds have exuded a sticky sap, frozen now. It is transparent, brilliant orange-red, a surprise in the blue and white landscape.

To the south, two ravens pass under the pale half-moon, teasing each other as they fly, blue sky reflecting on their backs. They seem to feel the warmth too. The seriousness of the cold has lifted for awhile.

To the west, another color I've never noticed before. Forests on the flanks of the Wind River Range are blue-black, almost the same color of the sky at its zenith on a full moon night.

To the north: south-facing benches and badlands are zebra-striped, melted ridges exposed.

To the east, a snow-covered sage hillside sculpted by the austere lines of windblown drifts and cornices.



"The bones of the weeds kept swinging in the wind above the blue snow."

"...The light moved slowly over the frozen field, over the dry seed crowns."

The beautiful surviving bones
Swinging in the wind."

From "The Lost Son"
by Theodore Roethke,
Collected Poems

SINGLE-MINDED CLONES?

To the Editors:

An important thread runs through two recent issues of *High Country News*. Howie Wolke, in an editorial, and Steve Paulson, in a letter, write about unmasking corporate deception and fighting industrial destruction. Who are these people, the chemical engineers, foresters and mining geologists? How are they different than the blue collar workers who support environmental causes? Are we to believe that positions of responsibility in business transform them to clones on a single-minded quest for profit?

Listen to Michael McCabe (HCN, p. 1, 1-12-79) when he urges environmentalists to avoid absolutism to be effective. Obstruction must be selective.

David Abbey
Española, N.M.

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Feb. 9, 1979 — High Country News

New BLM regs attack heart of wilderness act

Guest editorial

by Bruce Hamilton
Sierra Club Representative

Since the Wilderness Act was signed into law in 1964, the oil and gas and mining industries have been trying to push their way into the public's few remaining sanctuaries of wildness. New proposed federal guidelines may be bringing the threat of mines and oil wells one step closer.

The 1976 Federal Land Policy and Management Act requires the Bureau of Land Management to review the public lands it administers to identify potential wilderness tracts and to protect the wilderness character of those lands until Congress decides if they should be designated wilderness.

The BLM's lawyer, the solicitor of the Interior Department, issued an opinion in September 1978 saying that FLPMA required the BLM to allow pre-FLPMA mining and mineral leasing to continue in the same manner and degree as occurred prior to passage of the act. However, post-FLPMA mineral activities could only be approved if they did not impair the wilderness suitability of the land.

This solicitor's opinion led to the filing of a lawsuit by the Rocky Mountain Oil and Gas Association. In its complaint, RMOGA argued that BLM would probably ban all new oil and gas activities in wilderness study areas because such activities "necessarily must 'impair' to some degree the wilderness characteristics of these lands."

RMOGA claims that the Wilderness Act explicitly allows mineral development in wilderness. It follows, RMOGA argues, that BLM should allow development in all wilderness study areas — even if wilderness values are destroyed.

The BLM appears to have responded to RMOGA's challenge by backing off and introducing the concept of acceptable "tem-

porary impairment" in its proposed management policy for wilderness study areas. The policy states: "oil and gas and mining activities whose impacts are only temporary are considered not to impair wilderness suitability." Temporary impairment is defined as "impacts that would be rehabilitated within five years after Congress designates the area as wilderness."

The BLM is employing a double standard that works against wilderness. During its roadless area inventory, the BLM is citing existing oil and gas and mining developments as reasons for disqualifying areas from wilderness consideration. Yet the agency proposes to allow similar activities in pristine areas, claiming that any new developments won't prejudice the wilderness recommendation and decision.

What's more, the five-year period referred to in the proposed regulations is impossible to define. How does BLM know when, if ever, Congress intends to designate an area as wilderness? Following BLM's temporary impairment guidelines, a wilderness study area could be crisscrossed with roads, mines and pipelines on the assumption that Congress wouldn't act to designate the area as wilderness for 30 years and the site could probably be rehabilitated in 35 years. The BLM proposal makes a mockery of the law that requires the BLM to preserve the wilderness option "until Congress has determined otherwise."

If Congress wants to dedicate an area to mineral production and delay the wilder-

ness decision, so be it. But that decision should be made by Congress, not the BLM.

The BLM management proposals also twist the language of the Wilderness Act to create another loophole big enough to drive a bulldozer through. Wilderness is defined in the act as an area where "the imprint of man's work (is) substantially unnoticeable." Congress put this language in the act to exclude consideration of developed areas but to allow consideration of tracts

where past signs of human activities have become insignificant with the passage of time. However, the BLM interprets the "substantially unnoticeable" language to allow new developments that can be hidden.

As an example, the guidelines suggest that small oil delivery pipelines could be allowed in wilderness study areas and would not have to be removed after Congress designates the areas as wilderness. By suggesting that industrial facilities can be compatible with wilderness, the BLM is opening the door to allowing new intrusions in existing wilderness areas.

The BLM interim management policy is the kind of foot in the door that the oil and gas and mining interests have been seeking for 15 years. It is an attack on the very heart of the wilderness system and should be vigorously protested.

Copies of the draft interim management guidelines and policy are available from BLM offices or from the Director, Bureau of Land Management, 1800 C Street, N.W., Washington, D.C. 20240. Comments are due by March 14.



Dear Friends

Jacque Shaw is leaving her duties as circulation manager to spend more time with her family, and Will Murphy is taking over the department.

Jacque was only here for a few months, but she quickly developed a knack with the hammer and the expletives that kept the mailing machine going. A longtime reader of HCN, she brought encouragement to the staff and approached readers with warmth,

friendliness and patience. We hope she'll attend an occasional staff meeting in the future. Her common sense advice on promotion tactics and editorial policy is invaluable.

Both Jacque's and Will's dedication kept us going when we were short-staffed last fall.

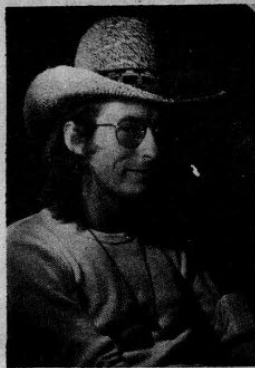
Will has been typesetting for HCN for several months, and we know from experience that he'll bring a sense of humor to his confrontations with outmoded equipment and cantankerous editors. Often the notes exchanged between the typesetter and the proofreaders are more interesting than the news copy. But that's grist for another "Dear Friends" column sometime.

In addition to his circulation and typesetting duties, Will plans to work with Jazmyn on promotion schemes.

Although Will's resume lists his areas of competence as "none" and he complains of being afflicted by both aphasia and abulia, we know better. Not only has he proved himself a master of many trades at HCN, he has worked as a stringer and a production manager for Seers Weekly in Albuquerque, N.M.

His interests — "music, chess, existential angst and mal de siecle" — no doubt will broaden ours, as soon as we figure out what they entail.

— the staff



WILL MURPHY

Photo by Jeffrey Finer

TETON PARK PROPOSAL

Last issue we erroneously reported that Grand Teton National Park Superintendent Bob Kerr "opposes" two environmentalists' park expansion proposal, which is aimed at protecting grizzly bear and other wildlife habitat. Phil Hocker of the Sierra Club and Howie Wolke of Friends of the Earth would like the federal government to add some 200,000 acres now under Forest Service supervision to the north and west side of Grand Teton National Park. They say that since the Forest Service refuses to recommend the entire

area for wilderness status, "then perhaps the area should be placed in more responsible hands."

Kerr says, "I'm not in a position to say I'm against it or for it. The ball is in the Forest Service's and Congress' court."

"What bothers me about the proposal is that nothing like that happens without a study," Kerr says. He adds that such a study would take lots of time and money.

Kerr says the Forest Service has the tools to manage the area to protect wildlife, "if they'll do it." And that "will depend upon the pressures put on them by groups like the Sierra Club and Friends of the Earth and by Congress," Kerr says.

Dollars and cents arguments for environment

The Tellico Dam decision is a good example of what Ralph Maughan means when he says environmentalists can use the surge of pocketbook conservatism to their advantage (see page 16).

Economic arguments convinced the Endangered Species Act committee to exempt the Tellico Dam — not concerns over the fate of the snail darter.

Although the Tennessee Valley Authority had already completed 90 percent of the \$115 million project, a staff committee report showed the costs of completing and operating it would exceed the benefits by about \$700,000 annually.

The chairman of the president's Council of Economic Advisers, Charles L. Schultz, encouraged the committee not to allow the project to be built. A representative of the state of Tennessee stressed the wildlife, recreational and agricultural values of the lands that would be obliterated by the project.

Dollars and cents arguments can be used effectively in countless other situations. An Idaho Falls Post-Register editorial

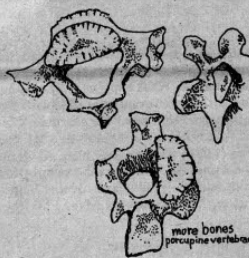
points out that good quality water in the Middle Fork of the Salmon River, which is worth \$5 per acre-foot when it flows out of the wilderness, has far greater dollar value than the wood or mineral products around it. Therefore, the paper says, the River of No Return Wilderness should include the headwaters of the Middle Fork of the Salmon River.

The Environmental Protection Agency and the Council of Environmental Quality came up with a study that shows that unemployment will increase due to pollution cleanup efforts over the next eight years.

Another study shows an impressive dollar loss in agricultural production due to air pollution.

While of course we can't ignore certain environmental battles just because we can't dig up the economic arguments to justify them, these figures are important — it's the only kind of sense that some people want to hear.

— MJJ



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Colorado nongame funding...

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the state fish and game department sounded the alarm that development was taking a devastating toll on nongame wildlife, the public rallied to the animals' defense.

In a year when taxpayers were generally tight-fisted, Colorado successfully used its 1977 income tax form as a large-scale fund-raising mechanism for wildlife. Not since voters tore up the plans to hold the 1976 Olympic Games in Colorado had the citizens of the state taken as strong a stand on environmental quality and the use of their tax dollars. Only this time, instead of casting a ballot, they reached into their pockets.

Despite this show of strong public support, however, the state legislature is subverting the intentions of Colorado's pioneering initiative, according to the program's backers. They hope to remedy that in part through a bill introduced in the current legislative session.

STRUGGLE FOR SURVIVAL

The nongame wildlife program in Colorado has traditionally struggled for survival. The Colorado Division of Wildlife is the agency in charge of managing all wildlife within the territorial boundaries of the state, and division monies come primarily from the sale of hunting and fishing licenses. While programs to enhance the well-being of sport animals have received all the funding they needed from the well-endowed Wildlife Cash Fund, nongame species have lacked a revenue-generating base.

It was the policy of the Division of Wildlife not to use hunting and fishing money to finance nongame programs, but that rule was bent in 1972 when the division drew money from the Wildlife Cash Fund to establish a nongame wildlife program. The money paid the salary of one person, who spent most of his time planning for the day when he would have enough money to do his job right. When it was suggested that a larger amount of money derived from licenses be directed towards nongame, sportsmen's groups were up in arms, complaining that the division's programs should operate on a pay-as-you-go basis.

In 1973, the Colorado General Assembly enacted the Nongame and Endangered Species Conservation Act. This act stated in part that "the general assembly finds and declares that it is the policy of this state to manage all nongame wildlife for human enjoyment and welfare...to insure their perpetuation as members of the ecosystem...and that adequate funding be made available to the Division of Wildlife annually by appropriations from the General Fund."

In 1974-75, \$86,000 was granted to the nongame section of the Division of Wildlife. The following year, in response to a desperate plea for more money to implement critically important programs, that figure was raised to \$135,582—about \$173 for each nongame species in Colorado. Meanwhile, the budget for sport species that year totalled \$16.1 million—over \$87,000 per species.

Wildlife officials and conservationists reached into an imaginative bag of tricks to try and raise more nongame money. A Division of Wildlife proposal to establish a personalized license plate program with net benefits going to nongame was ruled unconstitutional by the state attorney general, who said that revenues relating to motor vehicles must go to the Highway

Users Trust Fund. Over the years, the proceeds from the sale of T-shirts, decanters and wildlife stamps, added to charity benefits, rang up a dismal \$12,000.

Early in 1977 the Colorado Nongame Advisory Council, a citizens' group of advisors to wildlife administrators, produced a more sophisticated proposal: a voluntary income tax checkoff plan, designed along the lines of the political contribution checkoff box on the federal tax form, that would permit taxpayers to earmark tax dollars for the nongame program. The division welcomed the idea, drafted a bill and rushed it to the state house.

The proposition—the first of its kind in the nation—was not an easy sell to the conservative Republican legislature. Some lawmakers thought it was laughable to be so concerned about raising money for rattlesnakes and gophers when, they said, retarded children, the handicapped and the elderly were being shortchanged. There were objections against putting anything else on the income tax form; even though people did not have to check it off, some would think they were supposed to. And what if this checkoff tactic paid off? Then the legislature might have to fight back a whole series of checkoff proposals for other causes.

A compromise was hammered out, thanks to the dedicated sponsorship of Rep. Lee Jones (R) of Boulder, a former vice-president of the Colorado Wildlife Federation, and the intense lobbying effort of the Colorado Open Space Council, a coordinating organization representing 22 environmental groups.

Legislators agreed that if the public felt there should be more money to manage nongame wildlife, then they should pay for it. The 51st Colorado General Assembly passed House Bill 1390, which allowed any individual in the state receiving a refund from his or her state income taxes to donate part of it—\$1, \$5 or \$10—to the Nongame Wildlife Cash Fund. The contribution was tax-deductible the following year, and the act applied to tax returns filed over the next six years.

The checkoff money was to be added to general fund money to let the division set up and expand nongame programs it had been unable to afford before.

Prior to tax-time, the Division of Wildlife launched a \$20,000 campaign to educate

Colorado's nongame program vaulted from mediocrity to the largest in the country.



Colo. Division of Wildlife
Photo by Don Domenick

PRAIRIE DOG



Photo by Robert Hilgenfeld

NINE WEEKS OLD, a golden eagle.

the public and promote the checkoff box. A division release said, "All living things, including man, are part of a complex web of relationships. What happens to one living thing in that web eventually affects all living things in that web." For example, Colorado ranchers were reminded of the spring of 1974 when a March blizzard virtually decimated the baby rabbit population on the eastern plains, and coyotes began attacking the stockmen's calves.

"DO SOMETHING WILD"

Under the banner "Do Something Wild", sports celebrities Red Miller, the Denver Broncos head coach, and Dan Issel, the Denver Nugget center, rooted for the program on televised public service announcements. Gov. Richard Lamm (D) gave it an endorsement. Tax preparation experts were recruited to advise clients of their right to donate. Sportsmen's groups gave it their approval, thinking that once nongame took out its own bank account, it would no longer want to rob the Wildlife Cash Fund.

Coloradoans grasped the point quickly. They had had front row opportunities to observe wildlife while backpacking, skiing, driving for pleasure or berry-picking.

But no one dreamed that nongame would become the apple pie issue of the year; a groundswell of support from taxpayers made it the single most successful fund-raising effort on behalf of nongame wildlife ever conducted in this country. Surprising everyone, almost 90,000 people—more than nine percent of the Colorado taxpayers receiving refunds in 1977—showed their willingness to foot the bill by contributing \$345,206.30 to the Nongame Wildlife Cash Fund.

The state legislature, acting on the 1978-79 budget before the final dollar results were tallied, provided the division with spending authority for only \$100,000,

which meant the balance of \$245,000 was stowed with the state treasurer's office for the next year. That figure, added to the \$117,000 allocated from the General Fund, was applied to federal matching funds to jack up the 1978-79 nongame budget to a record \$688,000—over three times greater than ever before.

Press releases from the Division of Wildlife heralded the good news and announced plans for the most ambitious nongame program ever undertaken. Threatened and endangered species projects received the exclusive attention of this fiscal year's budget. The division planned to continue its reintroduction of the endangered river otter, a species that was virtually eliminated in the state during the 19th century by beaver trappers. Recovery efforts for the wolverine, the greenback cutthroat trout and the greater prairie chicken were to be initiated, along with the extension of a restoration project for peregrine falcon and a construction project designed to stabilize the nesting island of the threatened white pelican.

VAULTED FROM MEDIOCRITY

In terms of staff and projects, Colorado's nongame program vaulted from mediocrity to the largest in the country. Word of the wildlife bonanza spread, attracting inquiries from California, Wisconsin, New Jersey, the Wildlife Society in Mississippi and the Society for the Prevention of Cruelty to Animals in Massachusetts. The state of Montana announced plans to implement a checkoff program copied from the Colorado bill. At a press conference, Gov. Lamm boasted that the state was now "a national leader in preserving and enhancing nongame, endangered and threatened wildlife."

But behind the prosperous look of the program, there were problems. Foremost

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(continued from page 4)

among them was the issue of how the wealth of the checkoff fund was divided and why the whole \$345,000 was not fully utilized. House Bill 1390 stated that all revenues generated from the program would be directed towards the nongame projects of the division. But when the Joint Budget Committee of the state legislature met in February 1978 to allocate expenditures, it decided to appropriate only \$25,000 of what had been raised. At the time they made the decision, \$190,000 had already been contributed. "You shouldn't spend it all," a member of the committee said. "We want you to have something in reserve next year." The committee feared that the division might begin major projects that would have to be discontinued if checkoff funding dropped off.

The action bewildered the director of the nongame section of the Division of Wildlife, John Torres. He felt he was dealing with a deprived resource that needed all the money it could get to make up for lost time. He could not understand why only a fraction of the money that was available could be used or why 80 percent had to be kept in reserve.

Ignoring the budget committee's initial figure, the division submitted a request for \$125,000 to finance its nongame program. By this time almost \$300,000 had been counted in the checkoff till, with more coming in daily.

Rep. Jones took Torres' case before the budget committee. The nongame program was going downhill, she said, and it needed every dime possible. She talked about the widespread public support for the program, as indicated by the number of people who participated.

After a backroom bargaining session, she met with officials of the division and

told them the outcome: the budget committee would let them have \$100,000 if they agreed to tie all of it to federal programs that provided matching funds. The only federal programs available related to threatened and endangered species and provided matching funds on a one-third state to two-thirds federal basis.

Torres resented the legislature's insistence that checkoff money be angled towards federal dollars. He felt the needs of the resources should come first. But it was either \$100,000 matched or a flat \$25,000, so Torres felt there was really no choice.

This and other matching funds requirements have created problems for the division. While \$100,000 from the checkoff fund was being rigged to threatened and endangered species money, the legislature required the \$117,000 from the general fund to be matched with federal Pittman-Robertson and Dingell-Johnson funds. These funds come from an excise tax levied on guns, ammunition and fishing equipment. They cannot be used for reptiles, amphibians, mollusks or crustaceans but only for a species that might become a sporting-type animal. As a result, the division had to abandon many of its plans to deal with species that were not sport-related. The reptile program, for instance, aimed at reptiles and amphibians, was dropped.

LOST OPPORTUNITIES

The lost opportunities created when the balance of \$245,000 was deposited in a bank instead of put to work for the wildlife also distressed conservationists. More importantly they feared that the budget committee might use the large amount of money accumulating to justify withholding General Fund money in the future.

In fact the traditional nongame allowance from the General Fund, instead of



Photo by David Sumner
CLARK'S NUTCRACKER

No one dreamt that nongame would become the apple pie issue of the year.

being increased the allowable seven percent for inflation, was trimmed from \$125,000 to \$117,000. Apparently Colorado lawmakers did not feel obligated to appropriate as much money as they had in the past, even though the nongame act said: "The intent of the general assembly is that this program of the income tax checkoff is supplemental to any funding and is in no way intended to take the place of the funding that would otherwise be appropriated for this purpose."

Should the Division of Wildlife lose its General Fund support and be required to pin its nongame programs on voluntary donations, "It would probably spell disaster," says Torres. The size of the program and its stability would be placed at the mercy of a host of whims, he says.

The chairman of the nongame Advisory Council, Bob Erickson, feels the first year is often the dynamic phase of a volunteer effort, and he does not expect the high level of public interest to last forever. If only as a matter of responding to the will of the people, he believes the state should continue to do its share.

With the impoundment of funding by the state legislature and strict instructions as to how the professional managers of the resource could spend the money they received, some donors felt they had been double-crossed. They announced inten-

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tions to file a lawsuit: if the program was not going to be conducted the way it had been advertised, they wanted their money back. Others advocated writing a new bill that plugged the loopholes. Rep. Jones is attempting to plug some of those loopholes through amendments to the nongame funding bill. One of her amendments would require that the cost of the nongame program be borne by a general fund allocation and that the checkoff funds be used as a supplement to that. Another amendment would give the Division of Wildlife the authority to manage endangered plants and insects under the nongame program. Another would allow donors to give more than \$10 to the fund if they wished.

CONFRONTATION

The stage is set for a legislative confrontation. At least one state legislator does not believe it is the purview of the general fund to support a nongame program. From the outset, Republican Rep. Steve Durham of Colorado Springs has been a hard-line opponent of the bill. He has contended it was "bad precedent to start cluttering your income tax forms with things like this. Once you deviate from normal taxing policy, what's next? We'll probably have pressure to box additional funds for the mentally retarded next year. And the year after that for the treatment of mental illness. The potential to add causes, once you've started, could result in an endless number on there in a few years."

Durham maintains the state should not be the collection agency for private donations. "Since (the checkoff box) is not a mandatory tax, essentially what you have established is a non-profit corporation soliciting funds for distribution under the guise of the state."

Durham plans to broadsheet H.B. 1390, not by bluntly proposing a total repeal of the act but "through the appropriations bill. That's the best place to deal with it." When it comes time for the legislature to allocate expenditures, he will try to send nongame to the end of the line, behind utility relief, the elderly, the handicapped and other issues. If there are no funds left by the time its turn comes around, legislative priorities and a limited budget can be blamed.

As this report goes to press, the state legislature has just begun its '79 session. Conservationists are watching carefully to see if, indeed, the Colorado checkoff program is a lesson in environmental law in-the-making.



WESTERN GARTER SNAKE

Defenders of Wildlife photo by Dick Randall

Graphic Arts Center Publishing Company

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After Silent Spring...

(continued from page 1)

ow the impetuous and heedless pace of man rather than the deliberate pace of nature. . . . The chemicals to which life is asked to make its adjustment are no longer merely the calcium and silica and copper and all the rest of the minerals washed out of the rocks and carried in rivers to the sea; they are the synthetic creations of man's inventive mind, brewed in his laboratories, and having no counterparts in nature."

Utilitarian conservationists such as Teddy Roosevelt had looked upon stewardship of the earth as a means of insuring the country's economic future. Others such as wilderness advocate Robert Marshall worried that man's spirit would wither as an increasingly artificial environment replaced his natural surroundings. Rachel Carson warned the public of a different dilemma. The issue now became not board feet of lumber or wilderness respite for the masses but life itself. The mainspring behind the book's popularity was the most basic of fears, the fear of death — a slow and grotesque death, as Carson described it. Her warnings inspired what has been termed the new conservation. Its issues are far more visceral than those espoused either by Roosevelt or Marshall, for they touch every member of the public directly.

In 1874, Othmar Zeidler, a German graduate student, put together a new compound, dichlorodiphenyltrichloroethane. For decades the formula lay forgotten in a filing cabinet. Sixty-five years later, Dr. Paul Muller reinvented the substance while working for the Swiss chemical firm of J.R. Geigy. Far more commercially-minded than Zeidler, Muller took the substance home, caught some houseflies, and put them in a glass box with his new powder. The next day all the flies were dead.

Further experiments seemed to show that DDT, as he called it, was just what the pesticide industry needed: a product that killed insect pests on contact but did not injure people. Geigy's representatives in the United States and Britain began marketing the chemical in 1942. By then World War II was raging — and with it the malaria, typhoid fever, and dysentery that have caused more deaths during armed conflicts than swords, arrows, bullets or bombs. Fearing a typhus outbreak after the capture of Naples, the Allies tried dusting the Italian city with DDT. Body lice carrying the disease keeled over, as had Muller's flies. Authorities credited the miraculous substance with saving 250,000 human lives. "This was," conservation writer Kenneth Davis, "but the beginning of DDT's march to glory. Soldiers and sailors by the millions carried small cans of DDT powder to protect themselves against bedbugs, lice and mosquitoes. They came to love the stuff."

They loved it as well when back in civilian clothes. Public enthusiasm soared for the technology refined during the war — penicillin, atomic energy and DDT now becoming available to make civilian life easy. The old myth of the garden, of superabundance, had received a blow when settlers encountered the bitter realities of the Western frontier. But the dream lived on, transferred, as Stewart Udall terms it, into the myth of scientific supremacy. Science and its handmaidens, technology, could put a car — no, two cars — in every garage. And with a similar childlike optimism, householders armed themselves with aerosol bombs to rid their kitchens of bothersome flies, their gardens of leaf-eating beetles. Science could fix anything.

DDT proved more than a convenience. United Nations teams traveled the world,

eliminating malaria from areas where the illness had blighted human life for centuries. In the United States, the Department of Agriculture promoted the poison as the salvation from Dutch elm disease and other real or imagined insect scourges. Representatives of the chemical industry advertised the synthetic killers and pointed to the high agricultural yields that were feeding the world's growing population. In 1948 Muller received a Nobel Prize for his discovery.

A few people took note of robins writing on their lawns after government airplanes sprayed their neighborhoods with DDT and related poisons to eliminate mosquitoes. Some scientists speculated that insects might build up resistance to the new compounds. There even were scattered lawsuits. But individual complaints were lost in the wave of enthusiasm. The chemical industry tallied its profits.

Still, for some people the unanswered questions about the long-range effects of pesticides became more nagging as ever larger doses of the compounds were turned loose. Then, almost overnight, *Silent Spring* united the doubters to create a nationwide controversy.

Viewed from hindsight, its author seems an unlikely person to generate a public quarrel. Shy, even withdrawn, she lacked the dramatic appeal of many past conservationists — the combative aplomb of a Carl Schur or the boisterous mysticism of a John Muir. Yet her patient attention to scientific detail and her calm in answering critics became the very qualities that won over the public during often-vicious personal attacks.

An outline of her career reflects simplicity and strength and sometimes plodding devotion to family and profession. When success came, it came almost as an embarrassment. The daughter of a real estate agent, Carson grew up in rural Springdale, Pa. Like many young people with strong but unformulated visions of a writing career, she signed up as an English major in college. However, inspired by a required science course, she switched to biology in her sophomore year. "It never occurred to me," she observed looking back on her education, "that I could combine the two careers." In this she eventually succeeded,

but not until after a somewhat ordinary climb on the academic and bureaucratic ladders.

Graduating magna cum laude in 1928 from Pennsylvania College for Women, Carson pursued a master's degree in zoology at Johns Hopkins University. Additional study followed at the Woods Hole Marine Biological Laboratory, located on the Massachusetts coast. From 1930 to 1936 she taught at Johns Hopkins and the University of Maryland, then moved to Washington, D.C., as an aquatic biologist with the U.S. Bureau of Fisheries.

In the Depression years she was lucky to get the job. Her father had died a year earlier, and she needed the steady income of government work to support her mother and other relatives. As for her writing, the *Baltimore Sun* paid for a series of articles about fisheries, and her position at the bureau involved creating scripts for radio broadcasts about life in the ocean. So far her professional life was personally satisfying but undistinguished.

Her chief at the bureau urged her to submit one of her articles to the *Atlantic Monthly*. "Underses" appeared in the September 1937 issue. In one of those flukes that beginning writers dream about, an editor at Simon and Schuster spotted the essay. He invited the government worker to dinner in New York and suggested she expand the piece into a book. Released a month before the excitement of Pearl Harbor, *Under the Sea-Wind*, combined keen scientific insights with lyrical prose to give readers intimate portraits of the sea. Yet despite the enthusiasm of its publisher, the book proved a financial failure. In the meantime, the Bureau of Fisheries combined with the Biological Survey to become the present Fish and Wildlife Service. Eventually Carson became chief editor of its publications. Fellow workers remember her as a taskmaster, tempering high editorial standards with humor.

Essentially, from the publication of *Under the Sea-Wind* onward, the story of Carson's public career becomes the story of her books. In 1951 the Book-of-the-Month Club chose *The Sea Around Us* as an alternate selection. Capitalizing on the public response, Oxford University Press reissued her first book which joined *The Sea Around Us* on the best-seller list. RKO pictures rendered the latter volume into a overdramatized but Oscar-winning movie. Publishing royalties put the author on a comfortable financial footing for the first

time in her life. She quit the government job, built a summer cottage on the Maine coast and looked forward to a quiet life of study and writing.

In 1955, Edwin Way Teale wrote Carson, "You have done it again!" He was referring to *The Edge of the Sea*. Again professionals and laymen alike praised her for the accurate and poetic revelations, this time on the rich ribbon of life found where oceans meet continents. Friends teased Carson about the danger of becoming a cult figure to her growing audience.

There was little chance of that for staid

Pesticides "work in a spectacular way; they give a giddy sense of power over nature to those who wield them."

Carson. In her view of the world, her musings along Maine's Sheepscot Bay remained far more essential than awards or speaking engagements. She might have gone on writing reflective but not disturbing books for her admirers. But along with her growing popularity came a slow change in her commitment and with it an often unpleasant public debate.

The Depression administration of Franklin Delano Roosevelt had placed major emphasis on preserving natural resources. However, World War II diverted much of that concern, and the movement continued to flag through the Cold War era. Yet along with others who treasured the natural heritage, Rachel Carson questioned the country's pell-mell rush into postwar development. Throughout her years in the Fish and Wildlife Service, she saw the loss of habitat as suburbs spread into the countryside and as the predator programs mindlessly poisoned coyotes and mountain lions. An avid bird watcher, she noted the decline of hawk and eagle populations. President Eisenhower's appointment of Douglas McKay as secretary of Interior typified the malaise accompanying prosperity. In the words of Audubon Field Editor Frank Graham, Jr., "McKay's comprehension of conservation was best reflected by his characterization of conservationists as 'punks'; his program consisted chiefly of leasing away public lands and driving out dedicated wildlife specialists."

Unlike the vitriolic historian and environmentalist of her day, Bernard DeVoto, Carson was not one to rush to the barricades. But when McKay fired the capable director of the Fish and Wildlife Service, she wrote an angry letter that appeared in the *Washington Post*, then later in the *Reader's Digest*. Referring to those who fought for national parks and wildlife refuges, she said, "Apparently their hard-won progress is to be wiped out, as a politically-minded administration returns us to the dark ages of unrestrained exploitation and destruction." Those were harsh words from a person known for the gentle writing of *The Sea Around Us*.

In 1958 an old friend from Massachusetts wrote her that local authorities claimed their DDT assault against mosquitoes "was entirely harmless." Yet the friend and her husband found dead birds scattered over their yard following the aerial spraying. She went on to vent frustration that as the summer progressed, mosquitoes waxed more virulent, while harmless insects, such as bees, disappeared. In writing a response, Carson did some research on DDT and found that "the more I



U.S. Fish and Wildlife Service photo

CARSON'S BOOK, *The Edge of the Sea*, describes the rich ribbon of life found where oceans meet continents. The photo shows her at work off the coast of Florida.

(continued on page 7)

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learned about the use of pesticides the more appalled I became." She saw "that everything which meant most to me as a naturalist was being threatened, and that nothing I could do would be more important" than to write a book investigating the synthetic poisons.

As was true of George Perkins Marsh, Carson began work on her most influential book in later years — she was 51, Marsh in his early 60s. The renowned ambassador, however, was condensing the observations of a lifetime into *Man and Nature* while working under pleasant conditions in balmy Italy. Carson, on the other hand, was striking out into new territory, so far little explored by anyone, including herself. And though financially independent by that time, she was writing against a host of nearly crippling personal circumstances.

With the death of her mother soon after starting *Silent Spring*, Carson suffered the shock of losing "the strongest single influence of her life," according to Carson biographer Paul Brooks. Throughout the writing she cared for a school-aged grandnephew. Flu, a sinus infection, and an ulcer dogged her, causing time lost from her desk. All this was the more troublesome because of the natural pace of her writing. Marsh wrote in a white heat once he got his pen warmed to the task; Carson composed slowly, turning out 500 words on a good day. In the midst of working on the new manuscript — while also supporting passage of the Wilderness Bill and preparing a new edition of *The Sea Around Us* — she began radiation therapy for the cancer that killed her in 1964.

Most telling in the comparison between the two writers is their attitude toward the evidence supporting their books. In a word, both were painstaking researchers. She knew that *Silent Spring* would provoke economic interests, that opponents would scrutinize its pages for factual weaknesses. She spent four and a half years evaluating every available scientific source.

The powerful sweep of *Man and Nature* showed how past civilizations misused the environment. Marsh illustrated forests degenerating into deserts, wheat fields into stony and abandoned valleys, "the forlorn monuments to human greed or improvidence." In 1962, nearly a hundred years later, *Silent Spring* followed a similar pattern. As with Marsh's tome, then, Carson's best-known book is long and necessarily detailed, though its organization is straightforward, its major points readily summarized.

From the outset she acknowledged the benefits of the chemicals when properly used. The dangers came from their abuse by a society "largely ignorant of their potentials for harm." DDT innocently sprayed on rose bushes by home gardeners washed away into rivers. Plants absorbed the chemical from the water; fish ate the plants. Birds and humans ate the fish. Only 20 years after its introduction, researchers were finding DDT not only in animals but in human mothers' milk and in the fatty tissues of the entire population. Carson described the threat as insidious, because the compounds are "unseen and invisible." Their quiet damage — whether killing birds or, she suspected, causing cancer and mutations in humans — can occur years after release of the poisons. Pesticides fit into an age-old pattern: what first appeared a boon would prove an instrument of man's destruction.

Not only was their use harmful and expensive, in many instances the chemicals didn't work. The spider mite actually thrived following the sprayings designed to eliminate them. The chemicals killed its natural enemies with greater efficiency. In



U.S. Fish and Wildlife Service photo

EARLY IN HER CAREER, Rachel Carson worked as an aquatic biologist for the U.S. Bureau of Fisheries. In the photo above she is gathering specimens of tide life along the Florida Keys.

other cases, Darwin was confirmed: only the stronger insects of a species survived the chemical assaults. They produced a resistant progeny. With ever more powerful doses of pesticides required to subdue them, their populations grew ever more resistant. Man had placed himself on a chemical treadmill; the faster he ran, the faster it spun. Carson urged sensible alternatives. She outlined the biological controls that sterilized and trapped pests or pitted one insect species against another — methods that were harmless to man.

Despite the disadvantages she cited, the pesticide programs had expanded year by year. For one thing, money talked louder than science. According to an irate and rebellious English scientist, pesticide proponents promised "salvation at the end of a spray nozzle." The industry channeled part of its huge returns into universities. What seemed a charitable gesture became, under Carson's analysis, a tax-deductible scheme to keep potentially critical entomologists in line.

She also delved into the psychology of government bureaucracies. A few years before the publication of *Silent Spring*, President Eisenhower — not known for his attacks on the status quo — warned about the aloofness of the military-industrial com-

Carson's arguments head-on, a well-funded campaign against the book condemned it as an emotional and inaccurate tirade.

An editorial in *Chemicals and Engineering News* compared *Silent Spring* to "indiscriminate shrieking." Some opponents went on to attack its author personally, reminding readers that unmarried Carson was an "unfulfilled woman." They falsely claimed that this "devotee of some cult" associated with "mystics and food faddists." A review in *Time* magazine accused her of "frightening her readers." It labeled her warnings about contaminated water supplies as "nonsense."

The myth of superabundance had lulled the American public, but not entirely. By the time *Silent Spring* appeared, Americans remembered sitting down three years earlier to Thanksgiving dinners without cranberries; the Food and Drug Administration had ordered the fruit off grocery shelves because of contamination by the pesticide aminotriazole. And only weeks before the book arrived in stores, they read newspaper accounts of babies born with eerie birth defects — victims of the tranquilizer thalidomide prescribed to mothers during pregnancy.

Runaway sales of *Silent Spring* brought

government investigations. For the first time they probed the long-term effects of the pesticides. Bureaucrats backtracked. To his credit, Secretary of Interior Stewart Udall, soon to be a pallbearer at Carson's funeral, broke ranks from the shuffling politicians and issued directives severely limiting pesticide use on the public lands under his control.

Throughout the debate Carson retained her typical calm. As she hoped, the investigations largely confirmed her allegations. As scientific evidence mounted in her favor, changes came. Along with other former critics, *Time* switched its position. The magazine now praised Carson "for her part in wakening her countrymen to the possible perils from pesticides and other chemicals." More importantly, Congress introduced a series of pesticide regulations.

On her death *American Forests* ungrammatically concluded that "Rachel Carson's impact on worldwide conservation was more profound than any other individual of her time." She provided lagging conservationists with the momentum that propelled the movement into the heady clamor of the late 1960s and early 1970s. Inspired by Carson, Aldo Leopold, Robert Marshall, and other leaders, the conservation movement is now characterized by grassroots activism — by an awareness of the interrelatedness of man and nature and by a chilling sense that the decisions of the next few years will determine the future of the planet.

Yet pesticide pollution continues in this country, if at a somewhat more cautious pace. Elsewhere, developing nations have turned to endrin, aldrin, 2,3,4-T, and a host of other compounds with mysterious names and supposedly wondrous properties, as shortcuts to prosperity. Musing on the future, Frank Graham remarks that the new conservation movement is so young that its history "has yet to be written. It should be a splendid (and hair-raising) adventure story, and the outcome will be in doubt to the very end."

Pesticides fit into an age-old pattern: what first appeared a boon would prove an instrument of man's destruction.

plex, of technologies and bureaucracies running roughshod over the nation's welfare. Following a similar line of reasoning, Carson observed that in contrast to undramatic biological controls, "The chemical weed killers are a bright new toy. They work in a spectacular way; they give a giddy sense of power over nature to those who wield them, and as for the long-range effects — these are easily brushed aside as the baseless imaginings of pessimists."

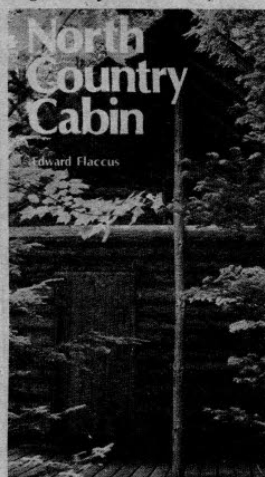
Stung by the allegations, industry counterattacked savagely. In Frank Graham's words, they "saw *Silent Spring* not as a scientific challenge, but as a public relations problem." Instead of tackling

the uneasiness of years to a flash point. The *Saturday Review* ran a picture of Carson on the cover of its September 29th issue with the caption, "Silent Spring marks the beginning of a national debate." The Book-of-the-Month Club offered the volume as its October selection. CBS Reports featured the book on two programs. In the next two years it sold over 1,000,000 copies.

The public was indeed frightened. Reporters peppered President Kennedy with questions about his stand on DDT. He directed his Science Advisory Committee to give the issue a thorough airing. The growing intensity of concerns spawned other

This article first appeared in the December-January issue of BACK-PACKER.

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by Edward Flaccus, Mountain Press Publishing Company, Missoula, Montana, 1979. \$5.95, paper, 122 pages. Drawings and diagrams by the author.

Review by Peter Wild

Pollsters have not yet determined the number of Americans who would like to live in log cabins. When they get around to the calculation, they'll probably find that the daydreams of most of us include a rustic retreat built with our own hands and tucked away in the woods. The urge is natural enough. It's part of the American dream of solitude, the pastoral vision running counter to our busy history.

Our forefathers hewed log homes out of the forest with an axe as their only tool. The present-day cabin builder, perhaps not as well-equipped either in muscle or wood lore, may wish to use a variety of tools. And he may wish to consult such helpful books

as Angier's *How to Build Your Home in the Woods* or Leitch's *Hand-Hewn: The Art of Building Your Own Cabin* before chopping out his logs.

He should also consider adding *North Country Cabin* to the reading list. In it, Edward Flaccus includes the information and diagrams that cover the basics of cabin construction. However, the book concentrates not so much on mechanics as on the pleasures to be had from the building. In this respect the author probes an area that others have ignored. After all, shouldn't the ongoing joy in a project of our own hands be its most important aspect?

Several years ago Edward Flaccus, a professor of ecology at Bennington College, hefted axe and peavey and pulp hook to build his log hideaway. He also brought along his children and students and dog, who together worked summers and weekends at a leisurely pace. *North Country Cabin* is the story of what they did and how they did it — and of the memories sparked by the process. Besides accounts of the expected rash of hooky to a nearby pond, we get some unusual reflections and historical tidbits — many of them useful, all of them interesting.

When no-see-ums plague his workers, Flaccus remembers that frontiersmen fought off insect assaults with liberal applications of rancid bear grease. On a more practical note, he passes along labor-saving hints: which kinds of trees to use, how to handle the chore of peeling logs, and the best method for notching their ends.

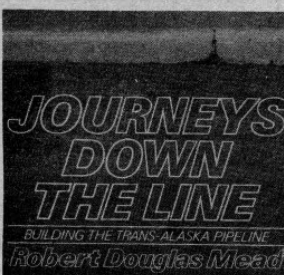
He enlivens his prose with witty and whimsical turns of phrase. In contrast to stubborn trees that demand hours of drudgery to peel, some species such as red spruce "give up their bark with grace." Throughout the building, the aging dog has lent "his support by his presence, and



sinuating it into the very soul of the cabin."

With an appendix that includes a bibliography, a list of useful trees, an order of operations, and a glossary, the book offers cabin owners and would-be cabin owners a

charming and useful experience. Furthermore, it comes at a modest price. *North Country Cabin* may be ordered directly from Mountain Press Publishing Company, P.O. Box 2399, Missoula, Montana 59801.



by Robert Douglas Mead, Doubleday, Garden City, N.Y., 1978. \$12.95, hard cover, 609 pages.

Review by Peter Wild

What do you do when a couple of hundred burly malcontents dump their spaghetti on the floor, then stand howling in the middle of the mess banging their metal trays on the tables of your isolated work camp?

Or when migrating caribou walk up to special sections of your pipeline — built eight feet off the ground for their convenience and at a cost of millions of extra dollars — sniff, and refuse to pass under it?

Or when, with the line nearly complete, it appears that some 4,000 of the 60,000 welds linking the lengths of pipe may be faulty and could spray goo over hundreds of miles of wilderness when the oil is turned on? To make the situation worse, a snoopy journalist catches wind of the defects and ranks the multi-billion-dollar project with "a poorly bottled jar of tomatoes about to explode."

The questions are only rhetorical, of course. When you're building something of

the size of the Alaska pipeline, of a magnitude comparable in its financing and political repercussions to, say, digging the Panama Canal or putting a man on the moon, you don't let the minor irritations stand in the way. The goal is to get the oil moving to markets as soon as you can. For the Alyeska Company the cash prize justified almost any costs — whether environmental or financial — involved in reaching that end. The pipe, made in Japan, turns out to be substandard? Well, stick it in the ground, boys. No time to be foolin' around.

"Just as we predicted," environmentalists might snort. Yet before we can get too self-righteous in our I-told-you-so attitude, author Robert Douglas Mead deals some sharp raps to the knuckles of the Sierra Club and Friends of the Earth. He also attacks — perhaps not always persuasively but often in a provoking manner — some of the pipeline myths: that the project represents a defeat for conservationists, that the social and economic costs traumatized Alaskans with skyrocketing inflation, prostitution and alcoholism.

Journeys Down The Line is a useful history of the Alaskan project. However, the author tends to get lost in the labyrinths of his own documentation, perhaps understandably in a 609-page study on a subject of this complexity. Then, too, he uses commas and semicolons in rather bizarre ways. They make the reading at times unnecessarily distressing — a fault that should be laid at the feet of his dozing editor.

Mead's conclusion: "Clearly we must manage our affairs better than this if we are to survive. . . ." That's an understatement! For environmentalists ready for a detailed post-mortem on the Alaskan pipeline fiasco, the book should prove helpful toward this end.

Wildwater: the Sierra Club Guide to Kayaking and Whitewater Boating

by Lito Tejada-Flores, Sierra Club Books, San Francisco, Calif., 1978. \$6.95, paper, 329 pages. Illustrations.

Review by Bruce Hamilton

Winter is the season to ski and dream of spring runoff and whitewater boating. There's a new book out to enhance your dreams — *Wildwater: The Sierra Club Guide to Kayaking and Whitewater Boating*.

Wildwater sets forth a comprehensive, step-by-step approach to learning kayaking. Unfortunately, you can't do all your learning sitting in front of the warm winter fire. You also need to immerse yourself in the experience — I mean dunk yourself — and then return to this book to find out what you did wrong. No words can give you all the experience you need to tackle a stretch of whitewater on your own, but *Wildwater* is a helpful companion.

The book is directed at kayakers and covers kayak equipment, handling, history, repair and safety. There is a brief section on other types of whitewater boats — rafts, paddle rafts, mini-inflatables and Sportyaks. Whitewater canoeing is not covered. The sections on reading the river, river camping, river etiquette, clothing,

first aid and safety pertain to all whitewater boating, however.

The section on reading the river — on deciding how to weave your way through keepers, haystacks, rollers and suck holes is clear and comprehensive. Numerous illustrations help the reader understand how best to negotiate the rapids.

The section on river first aid is a little disconcerting. You're told how to deal with hypothermia, near drowning and dislocated shoulders. Kayakers are particularly prone to all three. This information isn't included to scare you — but to help you reduce the risk.

One section of the book describes the most popular whitewater rivers in the lower 48 states. This section is sketchy; the authors warn you to consult local guidebooks and boaters. The book also offers a helpful list of publications, boating organizations, equipment manufacturers and river management agencies.

In addition, *Wildwater* has a commendable section on how to help protect free-flowing rivers from the threat of dams. Tejada-Flores says river touring and river conservation are inextricably linked. His aim is to inspire, and educate competent kayakers with consciences.

Bruce Hamilton is a whitewater canoeist and Northern Plains representative of the Sierra Club.

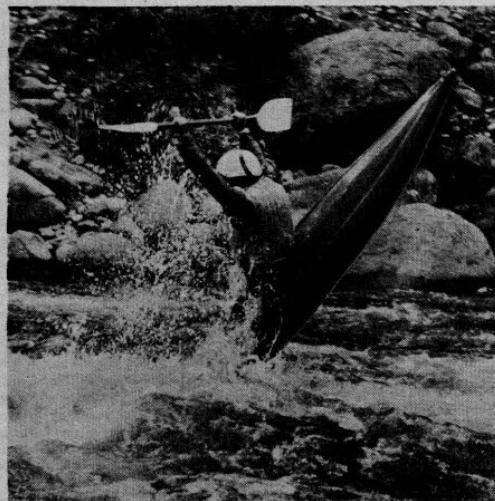


Photo by Steve Miller

"WHITEWATER PLAY," an illustration from *WILDWATER*.

A field guide to animal sounds in a Wyoming cabin

by Bruce Hamilton

We have a ghost in the bedroom of our cabin. Several times this winter our sleep has been broken by a loud knocking on the wall.

The first time we heard it we thought we had human visitors — perhaps someone with car trouble who needed help. But no one was outside. When we found mouse droppings in our yard, we thought perhaps the mouse was rubbing against the cabin. But when we peered out the window, no mouse was there.

In fact, there were no animal tracks anywhere around the corner of the house that the noise had come from. Our pre-dawn visitor appeared to be within our wall.

We started cataloging the creatures that have shared our cabin with us. Once a swarm of bees tried to set up housekeeping in our wall. You could put your ear to the wall and hear a steady, low buzz. We've also had crickets in the walls. Their high-pitched scraping noises made sleeping inside seem as soothing as a campout. But it is the wrong season and the wrong sound for either of those creatures.

Our house is also overrun with deer mice. But the ghostly thumping has to be made by something much more substantial than any of these creatures.

Another possibility occurred to me a few weeks ago after cross country skiing past some red sandstone bluffs near the house. Along our route my wife, Joan, saw something on the side of a cliff that caught her eye — a small cubbyhole filled with fur. Upon closer examination the hole contained hunks of rabbit fur encircled by juniper branches. Tucked inside we could see the pointed nose and two beady, black eyes of a pack rat (also called a bushy-tailed woodrat, *Neotoma cinerea*).

How it had gotten its nest materials and itself to the pothole six feet up the sheer sandstone face was beyond me. Joan boosted me up so I could take a picture of the nester. I started to pat down the billowy rabbit fur so I could get a full facial view of the occupant, but quickly withdrew my hand. No, the rodent didn't try to bite me, but its nest did. Hidden in the soft-looking fur and berries were dozens of cactus spines that attacked my fingers. (I've read since that some wood rat nests contain whole cactus beaver tails.)

The juniper clippings were a food storage pile — a necessity for winter since wood rats don't hibernate. The rabbit fur formed

a cup in the back of the cavity — a warm retreat from sub-zero winter weather.

Pack rats have three kinds of excrement. We saw brown, cylindrical droppings at the entrance to the nest. But the rats also produce a black tar-like substance and a white stain caused by accumulated urine. In his *Field Guide to Animal Tracks*, Olaus Murie explains how to tell the pack rat's whitewash from that left by a raptor: "Stains left by birds tend to be vertical streaks and heavily concentrated below a nest site or favorite perch; those left by wood rats tend to be shorter, may be vertical, diagonal, or horizontal, thus presenting an irregular pattern on a cliff face."

Once while viewing a friend's rock, mineral and fossil collection, I spotted a curious bottle sealed tight and labeled: "Petrified bat dung?" He said he'd found it underneath an overhang while climbing a rock face. I hated to tell him that his treasured bat dung was probably pack rat tar scat.

In the summer near the same red sandstone bluffs in the base of a juniper tree I found a wood rat nest that stood four feet tall — a loose pile of sticks, cow bones, horse dung, tin cans and other odds and ends.

I saw an equally memorable nest once when I was visiting the late naturalist, Alfred Etter, at his home in Aspen, Colo. Etter had been diverted from his job of replacing an old bathtub by a pack rat's handiwork under the tub. His naturalist's instinct had apparently overpowered his plumber's sense of duty. By the time I arrived, he was on the second page of his list of the contents of the nest. It included spoons, candles, soap, bottlecaps and all kinds of household objects that had been missing for years.

When I started reading up on wood rats I came across another interesting observation by Murie. He said that wood rats "will respond to a disturbance by drumming or

thumping with the hind feet, both coming down together....Or he will drum by pounding his tail. This has been referred to as a clatter or drumming. This and thumping with the feet appear to be nervous reactions to disturbances, though they may have a more specific meaning in wood rat communications.

"You may hear this if you are in a house or cabin that has been invaded by a wood rat," Murie wrote.

That's when it occurred to me that our pre-dawn thumper was probably nothing more than a distraught wood rat.

The nest included spoons, candles, soap, bottlecaps and all kinds of household objects that had been missing for years.

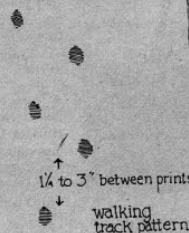


Bushy-tailed
woodrat
genus *Neotoma*

based on the
Field Guide to Animal Tracks
by Olaus Murie



feet of a
woodrat — slightly
larger than natural
size.



1 1/4 to 3" between prints

walking
track pattern



scats, natural
size

about 8"
running
track pattern



front and hind tracks in mud
slightly larger than natural size

10-High Country News — Feb. 9, 1979

Exemption won't harm crane habitat

Neither the snail darter nor the whooping crane, both endangered species, is expected to be harmed by actions taken by an Endangered Species Act committee last month.

The committee voted not to exempt the Tellico Dam in Tennessee from the requirements of the act, which says that federal construction projects cannot harm an endangered species, in this case the snail darter.

The committee did agree to exempt the Grayrocks Dam near Wheatland, Wyo., but only if the project's sponsors fulfill commitments made in an out-of-court settlement to protect the whooping cranes' habitat.

The U.S. Fish and Wildlife Service opposed the Grayrocks exemption because

the agency feared it would set a dangerous precedent. The National Wildlife Federation said the exemption was unnecessary because of the settlement the federation and other groups had already reached with the utilities.

However, NWF attorney Pat Parenteau said the cranes will not be harmed by the committee's decision. A federal judge has yet to approve the settlement conditions. The Endangered Species Act committee's action assures that whether or not the judge approves them, they'll be met.

One condition is establishment of a \$7.5 million trust fund, which would be used primarily to maintain crane habitat.

The Tellico Dam was turned down by the committee primarily for economic reasons. Charles Schultz, chairman of the Council

of Economic Advisors, said the land behind the dam was more valuable than the completed project. He also said there are more economical ways than a dam to achieve the project's purposes.

Sen. Howard Baker (R-Tenn.) has introduced an amendment to abolish the committee and to order completion of the Tellico project, but Washington observers don't expect the Senate to pay much attention to it.

The committee had been established by the last Congress as a result of pressure from Baker and others who thought the act should be weakened or eliminated.



Native Americans and Energy Development



Review by Sara Hunter-Wiles

The Indian tribes of the Western United States have an uncertain, if not bleak, future because of America's ever-increasing demand for energy, according to a report recently released by the Anthropology Resource Center of Cambridge, Mass. This report, a series of five articles, documents the problems of energy development in rural areas of the Rocky Mountain region, particularly on Indian reservations.

Anthropologist Joseph Jorgensen is the senior author of the report. He sets the tone with his anti-capitalistic economic analysis of the role of the rural West and what he refers to as his "metropolis-satellite" model.

He says his model provides a "road map" that shows why capitalist success for undeveloped economies cannot be reached because it entails expropriation and exploitation. He says capitalism inevitably leads toward world underdevelopment rather than away from it.

"The satellite provides resources and labor for the metropolis and consumes the

goods that are owned and produced by the metropolis, but it does not share proportionately in the surpluses from its own area, nor does it concentrate political and economic power."

Energy development, Jorgensen says, is yet another step in the "rapacious development" of the West, which he considers a satellite to large urban areas. The West is vulnerable because of the shift from labor-intensive agriculture to capital-intensive agribusiness, which leads to a loss of economic power, he says.

Indians are particularly vulnerable to energy development for several reasons, Jorgensen says.

First, their poverty has been marked and of long duration.

Second, they lack a management structure that can deal effectively with government bureaucracies and large corporations, and the legal status of reservations and Indians' mineral and water rights is uncertain.

Third, reservations are rich in minerals. The Council of Energy Resource Tribes estimates that 33 percent of the nation's low-sulfur, strippable coal; 80 percent of the uranium; and between three and 10 percent of the gas and petroleum reserves lie on reservation land.

Jorgensen lists among the costs of energy development: loss of water, pollution and other environmental destruction, and a lot of "social disarray" because institutions both on and off reservations are inadequate to deal with the increased social and population pressures. These problems, particularly the social aspects, are not being adequately addressed by governments or corporations, even in the federally-required environmental impact statements, he says.

Other articles in the report support Jorgensen's views. The tragic stories of the Hopi struggle to prevent coal development on Black Mesa and the repeated bad experiences of the Navajo Nation with federal government and large corporations are documented. Some hope lies in the fact that the Hopi and Navajo, along with other tribes in the Rocky Mountains, are beginning to develop bureaucratic structures to defend themselves and their rights, according to the study.

But is this enough? According to Dr. Nancy Owens, the taking of energy resources still represents the rape of the re-

servation satellites, with only short-term economic benefits.

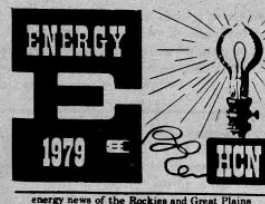
In many cases Indians are being forced to develop white institutions that are incompatible with their philosophies and way of life, according to Dr. Owens. Alternatives lie in developing management structures based on Indian needs and geared toward a self-sufficient "inner economy" on each reservation.

Perhaps the most enlightening article in the report is Ronald Little's survey of boom towns near reservations. In it, white citizens indicate that they favor energy development and the economic benefits that it brings, they are unaware of social and environmental changes that will affect their own lives, and they are unaware of and unconcerned about the effects of development on Indian populations.

Despite this evidence, Little concludes his article on the optimistic note that there appears to be growing skepticism about the promises of energy development in the still basically rural towns surveyed in Montana and Utah. But will it allow enough time for Indian and other residents of the rural West to adapt without major environmental and cultural disruption?



HOPIS at Black Mesa mine: The Hopi's tragic struggle to prevent coal development is documented in the study.



NAVAJOS BID FOR LEASE RENEGOTIATIONS.

In an effort to force energy companies doing business on the Navajo Reservation to terminate old agreements and renegotiate, Navajo Tribal Chairman Peter MacDonald has frozen the issuance of right-of-way permits across tribal lands. A company must acquire a right-of-way for construction of facilities such as transmission lines and pipelines. Without a right-of-way, a company would be unable to mine coal or uranium even if there were an existing lease. A spokesman for the tribe says, "In general, what was granted to the tribe by the BIA 20 years ago...is insufficient." The BIA approves leases and has a trust responsibility to protect the tribe's resources. By trying to force the lease renegotiation, MacDonald is carrying out a campaign promise made during his successful re-election bid last year.

OIL MAN BACKS RARE II. The president of the American Association of Petroleum Geologists says that the U.S. Forest Service proposals in RARE II (the second Roadless Area Review and Evaluation) are "reasonable" and should be supported by the oil industry. Robert D. Gunn says that the study, which has been severely criticized by environmentalists, gives the industry access to over 85 percent of the potentially valuable lands in the national forest system. Some oil organizations, notably the American Petroleum Institute, have criticized the study for not opening up more land. Environmentalists say that the RARE II proposals do not provide enough wilderness.

COLSTRIP 3 AND 4 REVIVED. Five utility companies, led by the Montana Power Company, will ask the U.S. Environmental Protection Agency to reconsider their application for the construction of two 750 megawatt power plants in Colstrip, Mont. EPA refused to issue construction permits for the plants last year on the grounds that the emissions would violate Class I air quality standards on the Northern Cheyenne Indian Reservation, 15 miles south of the proposed site. The companies have modified their proposal to attempt to meet the stringent Class I standards, which allow virtually no deterioration of air quality in areas so designated. However, despite the changes in the plans, Montana Power will continue with a legal challenge opposing EPA's decision. The company contends that the plants should be built because the state had approved the units before the Class I designation was granted to the Indians. In addition, the state legislature is now considering a law which would exempt Colstrip 3 and 4 from Montana industrial siting laws, thus removing the other major roadblock to construction.





The HCN Hot Line

energy news from across the country

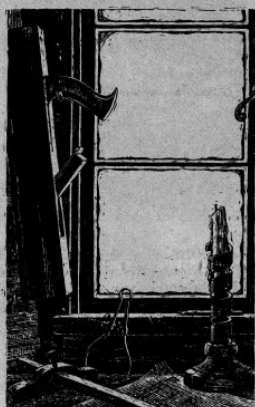
AIR STANDARDS TOO TOUGH? Consolidation Coal Co. has petitioned the Environmental Protection Agency to ease national air quality standards on sulfur dioxide, according to **Land Use Planning Report**. The firm says that it is losing \$160 million annually in high sulfur coal sales because of the standard. EPA is currently considering changes in power plant air quality rules, and Congress will review standards next year, but a Consolidation vice-president says, "We don't think we can wait until next year."

SELF-SUFFICIENCY? The General Accounting Office, a research group for Congress, says that the Northwest could provide 96 percent of its own energy needs by the year 2000. In a Northwest energy report, the GAO recommends energy conservation and reliance on water, wind, solar and geothermal sources, rather than nuclear or coal. With a moderate-growth economy, the Northwest would need no more fossil fuel plants beyond those already planned, the report says.

NO ADJUSTMENT IN PEANUT LAND. The Georgia Public Service Commission has banned use of the fuel adjustment clause by both Georgia Power Co. and Savannah Electric and Power Co., according to **Power Line**. Since the clause makes it possible for Eastern utilities to buy Western coal and to pass the extra transportation costs directly on to customers, many Western environmentalists and Eastern coal miners support such bans.

COSTS OF CONSERVATION. Natural gas consumers in Washington, D.C., who reduce their consumption significantly may be asked to pay a surcharge by Washington Gas Light. The company says the \$14 per month surcharge would apply to customers using electric heat pumps, propane or wood stoves for most of their heating needs, according to **Power Line**. A company official says, "We believe that full use of gas is still the most efficient and economical."

IRAN'S IMPACT. The domestic crisis in Iran may mean less oil for the United States and a need to relax environmental standards to make up the difference, says Secretary of Energy James Schlesinger. In an interview on CBS's "Face the Nation," he said, "We should reconsider certain environmental constraints which have had the effect of reducing our capacity for gasoline production by 500,000 barrels a day." He added that his view was not shared by all others in the administration, however.



PIPELINE PAUSES. The state of Minnesota has dealt a blow to the Northern Tier Pipeline project, which would carry Alaskan oil from Port Angeles, Wash., to Clearbrook, Minn. The director of the Minnesota Energy Agency ruled in January that the pipeline does not meet that state's requirements for siting major energy facilities because the quantity of oil it would deliver is not needed by the northern tier states. While a pipeline company spokesman said in an Associated Press story that he viewed the decision as an unexpected blow, "obviously, we're not going to abandon the thing." A draft environmental impact statement on the pipeline, which would pass through Idaho, Montana and North Dakota as well as Washington and Minnesota, has been published by the Bureau of Land Management. Comments should be sent by March 12 to state director, BLM P.O. Box 2965, Portland, Ore. 97208. Copies of the statement are available at BLM offices in the proposed pipeline states.

Feds mull 65 mph compromise

Two federal agencies may be willing to compromise with states that want to raise their speed limits above the national 55 mph standard. The compromise would allow states to raise their speed limits while retaining federal highway assistance money.

The departments of Energy and Transportation say that they are "willing to talk" about a proposal that would allow increased speed if it were coupled with a 10 cent-per-gallon increase in the state gasoline sales tax. The tax increase would then be used for state programs to encourage energy conservation and alternative energy projects.

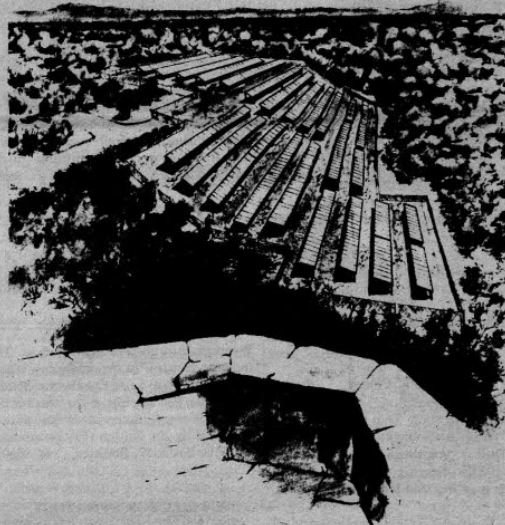
So far, 17 Western states, led by Wyoming, have indicated that they are interested in increasing their highway speed limits beyond 55 mph. Wyoming State Sen. Cal Taggart, who introduced the proposal to the Wyoming legislature, says, "We're trying to say, 'Let us guide our own destiny.'"

We're just fed up with the feds dictating everything to us."

Under current law, any state that does not adhere to the 55 mph limit stands to lose its share of federal highway money — \$51.7 million in Wyoming's case and more for more populous states. Under the compromise, proposed by Rick Hunnicutt of the Wyoming Energy Conservation Office, states would retain their funds if they imposed a sales tax. If applied nationwide, the sales tax would raise about \$10 billion annually.

However, while the federal government may like the 10-cent tax idea, the Wyoming legislature probably won't. Taggart says that there isn't time or inclination in the legislature to impose a large sales tax on gasoline, particularly in light of the Proposition 13 tax-cutting fever. In fact, the legislature has eliminated a 14 cent-per-gallon tax from one piece of 65 mph legislation. Fourteen cents per gallon is the amount required to replace the money lost from federal highway assistance if the 65 mph speed limit passes.

National parks demonstrate solar devices



SOLAR ENERGY will supply up to 100-kilowatts at Natural Bridges National Monument, as shown in this artist's conception.

Visitors to many national parks and monuments in the West are getting a look at ways to use solar energy and wind power while they're enjoying scenic wonders, according to an article in the **National Parks and Conservation Magazine**.

At Natural Bridges National Monument in Utah, an acre of ground will soon be covered by an array of solar cells, which can produce 100-kilowatts. The photovoltaic system, funded by the National Park Service, the Department of Energy and the Massachusetts Institute of Technology, will power all the facilities at the monument for most of each day. The system is expected to be ready by September.

Visitor centers at Bighorn Canyon National Recreation Area in Wyoming, Mount Rushmore National Memorial in

South Dakota, Pecos National Monument in New Mexico and Carlsbad Caverns National Park in New Mexico are already or will soon be heated and cooled by solar energy.

At Theodore Roosevelt National Park in North Dakota, both wind and solar energy will be used. A solar collector will heat and cool a visitor center and a windmill will provide supplemental electricity. Wind energy may also be used at Pecos National Monument in New Mexico.

Not all National Park Service attempts to use renewable energy have been successful. One experiment in using naturally cool air from caves to air-condition centers at Mammoth Cave and Carlsbad Caverns was abandoned when the Park Service found that it resulted in dehumidifying the caves.

classifieds

ORGANIZERS WANTED The Powder River Basin Resource Council, a citizens' resource conservation group concerned about energy development in eastern Wyoming, wishes to hire field organizers immediately. Energetic people with leadership potential and simple tastes are desired. Invaluable experience. Send resume to PRBRC, 48 N. Main, Sheridan, WY 82801 (307) 672-5809.

READ THE INFORMATIVE BOOKLET, "WOODBURNING STOVES". \$2.00. Burns Solar Press, 78 North 12th, Brighton Colo. 80601.

SKI TOURING PHOTOGRAPHS NEEDED New, richly illustrated ski touring book to be published. We are searching for unique, creative B&W photos. Published photos will be credited. Send submissions to: Ron Watters, Box 9024, ISU, Pocatello, ID. 83209. For sample of work see recently published **Ski Trails and Old Times' Tales**. Solstice Press.



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12-High Country News — Feb. 9, 1979

BLM picks 86 potential Wyoming wildernesses

by Philip White

Ninety-two percent of the Bureau of Land Management's 17.8 million acres in Wyoming clearly and obviously do not qualify for further study of wilderness potential, according to BLM's proposed "first cut" in the wilderness inventory process. Eighty-six areas totaling 1.4 million acres in Wyoming would receive further study. The BLM made the selections from over 250 roadless areas in the state.

Wyoming's BLM office is the first to release its proposed list of non-qualifying areas. Most Western states will release similar lists by April.

After a 90-day public comment period ends on May 15, the Wyoming state director will publish a final list of non-qualifying areas, releasing them from the development restrictions that are placed on potential wilderness.

Gene Herrin, an official in the state BLM office in Cheyenne, says pressing resource conflicts are forcing the Wyoming office to move quickly. "We've been criticized for being early and not allowing a field season to look at these areas. Our plan, though, is to eliminate areas with no wilderness potential now and devote the summer to a good field study of the areas still under consideration."

Herrin says the agency "is wide open for public comment. If the comment shows that the public wants some areas put back in for study, we'll put them back."

Informal open houses in 10 Wyoming communities are planned by BLM in February, and nine public meetings are scheduled in March.

Adobe Town, a badlands area southwest of Rawlins, is the largest area identified for further consideration in the Wyoming

proposal. Although 100,000 acres survived the cut at Adobe Town, a large chunk on the east and south parts of the original roadless area would be eliminated. On the north, the checkerboard pattern of land ownership resulting from the railroad land grants of the 1860s eliminates thousands of acres of roadless public lands from wilderness consideration.

The Honeycomb Buttes (73,000 acres) and Oregon Buttes (7,300 acres) areas northeast of Rock Springs, Ferris Mountains (43,500 acres) north of Rawlins, Raymond Mountain (35,000 acres) near Kemmerer, Gardner Mountain (22,000 acres) west of Kaycee and Sweetwater River canyon (7,700 acres) south of Lander are among the areas to receive further scrutiny in the Wyoming proposal.

Dick Randall, regional representative for Defenders of Wildlife in Rock Springs and an expert on the Red Desert of central Wyoming, said he had not obtained any detailed information yet on the proposed cut. He predicted "a long war. It looks bad, too, because of the uranium in the desert. They're out staking now with snowmobiles pulling sleds full of claim stakes."

INTERIM MANAGEMENT GUIDELINES

Meanwhile, the national BLM office released draft guidelines for regulating mining and managing wilderness study areas during the inventory.

Frank Gregg, BLM director, says the guidelines would allow a variety of mining activity during the inventory. "Mining in progress on October 21, 1976 (the date of passage of the Federal Land Policy and Management Act, which requires the wilderness inventory) can continue in the same manner and degree even if the result

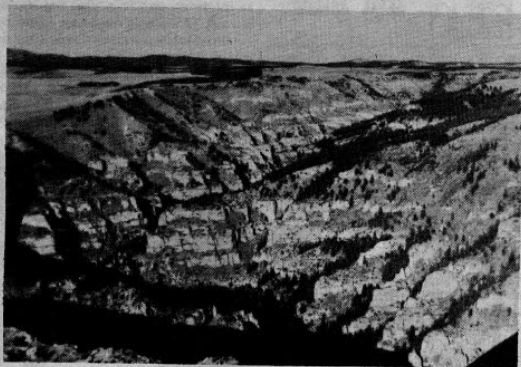
is impairment of wilderness values. New mining activity can be permitted so long as any impacts it would cause are either substantially unnoticeable or can be rehabilitated within five years of congressional designation of an area as wilderness," Gregg said.

Debbie Sease of the Wilderness Society in Washington, D.C., is critical of the latter provision, saying "the approach institutionalizes the concept of recycled wilderness."

The draft restrictions would prohibit most clearcutting, surface coal mining and

the construction of power plants and permanent roads. However, under certain conditions the proposals would allow other activities, such as oil and gas exploration and development, range improvements and temporary road building, after approval from BLM. Off-road vehicle use could continue in wilderness study areas.

BLM will schedule national and state meetings during the 60-day review period ending March 14. Comments should be sent to Director (303), BLM, 18th and C Streets NW, Washington, D.C., 20240.



BLM photo of the Powder River, will be studied for wilderness consideration under a BLM inventory process. This area is on the east slope of the Big Horn mountains near Buffalo, Wyo. The BLM proposes to give further study to 86 areas throughout Wyoming.



LOONEY LIMERICKS

by Zane E. Cology

A lady who wrote 'bout the sea
Moved inland to make one small plea:
"Quit it, you thugs,
Give up spraying bugs.
Stop spewing that foul DDT!"

PARK COURSES

Six-day credit courses on various aspects of the Rocky Mountain environment will be offered in Rocky Mountain National Park this summer. The courses are sponsored by the National Park Service; the Rocky Mountain Nature Association, Inc.; Colorado State University and the University of Northern Colorado. Fees range from \$60 for one seminar to \$475 for nine. For more information contact: Seminar Coordinator, Rocky Mountain Nature Association, Inc., Rocky Mountain National Park, Estes Park, Colo. 80517.

WHAT? WHO? HOW?

Professional natural history interpreters are invited to a workshop in Denver designed to set up a Colorado chapter of the

Western Interpreters Association. The meeting, entitled "Interpretation — What? Who? How?" will be at the Denver Botanical Garden Feb. 22. For more information, contact Western Interpreters Association, in care of the National Audubon Society, P.O. Box 3557, Boulder, Colo. 80307.

PRIZE FOR STRATEGY

The 1979 Mitchell Prizes offer a total of \$100,000 in cash to individuals "demonstrating the highest degree of creativity in designing workable strategies to achieve sustainable societies." The first round of judging will be based on written summaries of proposed entries, which may be research, scholarly papers, films, engineering drawings, working models, computer models or other projects. Maximum length for the summary, which is due Feb. 28, is 2,500 words. Application forms are available from Woodlands Conference, University of Houston, 312 C and O, Houston, Tex. 77004.

BURROS

Meetings on Grand Canyon National Park's proposed burro management plans will be held in late February and March. The park's Draft Plan and Environmental Statement outlines four alternatives rang-

ing from doing nothing to removing the burros from the park. The burros have severely impacted the park's soils and native plant and animal life, according to a Park Service news release. All of the meetings

will begin at 7:30 p.m.: Feb. 27 in Flagstaff, Ariz.; Feb. 28 in Phoenix, Ariz.; March 1 in Tucson, Ariz.; March 6 in Salt Lake City; March 7 in Las Vegas, Nev.; and March 8 in Los Angeles.

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Western Roundup



Feb. 9, 1979

13

RARE II setback hasn't stopped FOR

MISSOULA, Mont. — The northern rim of the bowl that encloses Missoula, Mont., is called the Rattlesnake after the creek that winds its way down from the high peaks to the city. Over 46,000 acres of this land was a part of the Forest Service's roadless area review and evaluation. In December the agency placed the area in a "further planning" status rather than in "wilderness" or "non-wilderness" use. The decision caused great controversy at a recent meeting of the citizens' group called the Friends of the Rattlesnake (FOR).

One of the elements in the controversy is the checkerboard ownership of the area, which could make wilderness designation complicated. In addition to public land managed by the Forest Service, land is owned and managed as watershed for the city of Missoula by Montana's major utility, the Montana Power Co. Railroad and logging interests also own parcels of the Rattlesnake.

Another element, and perhaps the greatest source of controversy, is a study done by FOR that concludes that the Rattlesnake is much better qualified to be designated wilderness than Forest Service data indicates.

The Forest Service said the public response was evenly split on wilderness designation for the area. FOR questioned the value of responses on form letters handed out by the lumber mills when weighed against personal letters, particularly from experts in wildlife, water resources and forestry.

The Rattlesnake's ultimate fate may lie in a much discussed but little understood concept called "Backcountry Status." Regional Forester Robert Torheim said that the term needs to be defined by Congress, but he sees it as a "roadless recreational area." Some temporary logging roads might be allowed however, he said.

Another Forest Service official said that backcountry status could mean huts, out-houses, and picnic areas in the Rattlesnake.



SUPPLEMENTAL FEEDING of elk in Colorado has been necessary in some areas, such as at the Wintz ranch

south of Creede. Pictured are Glen Hinshaw of the Colorado Division of Wildlife and Mrs. Ed Wintz.

Tough winter convinces states to feed game

Due to brutal winter conditions, fish and game agencies in several Western states have activated their emergency feed programs for large game animals.

In Idaho, Fish and Big Game Supervisor Jerry Thiessen says the mean winter temperature in some areas has been the lowest since 1937, and snow has been on the ground in some areas longer than in any other year since 1940. Snow covers

feed and hampers the animals' travel. The cold burns up their fat reserves.

In Wyoming, these conditions have forced hundreds of antelope in the southern portion of the state up against the Interstate 80 fence, and heavy snows have trapped them there.

Game officers hesitate to start feeding the animals because they're afraid the game may become dependent upon it. Wyoming Game and Fish Nutritionist Ron Dean says the animals might be encouraged to make a yearly trip to the feeding grounds, bypassing more nourishing forage and becoming susceptible to road and dog hazards.

Ken Persson of the Lander District Office of the Wyoming Game and Fish says deer under stress often can't digest hay when it is fed to them suddenly. The change in diet is a "tremendous shock," and sometimes more are killed than are helped, he says.

In other parts of the state, many weakened animals that have been driven

into the suburbs have been killed by dogs. More than a hundred dogs, most of them apparently pets, have been shot and killed by wildlife officers.

The game and fish departments are trying to lure game away from populated areas and roads with hay and alfalfa pellets. The Wyoming Game and Fish Department is also using firecrackers to disperse them.

Redford makes friends in Utah

Robert Redford is trying to prove by example that southern Utahns don't have to depend upon coal-fired power plants to improve their local economy.

Three years ago Redford was burned in effigy in southern Utah for his role in discouraging construction of the Kaiparowits power plant there. Now he has become a welcome patron of local businesses and an honorary member of the St. George Elks Club, according to the Associated Press.

Redford brought the crew for his new film, *The Electric Horseman*, to the area even though the script called for filming in New Mexico. The crew spends \$10,000 to \$12,000 daily.

"The idea that you've got to create jobs and industry is fine, and I agree with that...I think there is other industry...such as the film industry. It's like a plaything that people can make a few bucks off of," he says.

Barges in upper Clearwater opposed

The U.S. Coast Guard is apparently proceeding with plans to build a new bridge over the Clearwater River in Lewiston, Idaho, despite opposition from several state agencies and the local newspaper. Even the principal intended beneficiary of the project has withdrawn its support.

The \$40 million project would harm salmon and steelhead and other wildlife along the river, according to the Idaho Fish and Game Department. The Coast Guard's plans include dredging the river bottom, which, combined with the higher bridge, would allow barges to go up the river above Lewiston.

The department says, "Continued existence of the high density and extremely important fish-holding areas is not compatible with...commercial navigation and port facilities."

Initially, the Potlatch Corp. plant, which is upstream from the bridge, wanted to move its paper and wood products by barge. However, the company has since decided it isn't interested in barging from above the bridge.

The Coast Guard and the Idaho Depart-

ment of Transportation held a public hearing Feb. 1 in Lewiston on the draft environmental impact statement. Almost all of the speakers were opposed to the bridge, primarily for environmental reasons, according to Kurt Burkholder of The Environmental Clinic at the University of Oregon.

Opponents of the project say they hope the Coast Guard will drop its plans. If it doesn't, they may go to court.

EPA relaxes air standard for oxidants

The U.S. Environmental Protection Agency has decided to relax its standards for oxidants, an air pollutant caused by emissions from automobiles, oil refineries, gasoline stations and chemical plants.

EPA Administrator Douglas Costle says the standard was changed from .08 to .12 parts per million when health tests showed the tougher rule wasn't necessary.

However, the American Lung Association and several environmental groups say the change was made for economic and not

environmental reasons.

The American Petroleum Institute intends to file suit to force an even weaker standard, saying EPA has made it "virtually impossible" to build a new refinery anywhere in the United States.

Most Western metropolitan areas that did not meet the old standard also do not meet the new standard. However, Tucson, Ariz., and Albuquerque, N.M., may be able to comply with the new standard, according to EPA.

I WAS IN THE DOG HOUSE

by Myra Connell

A leaflet enclosed with my social security check describes the risks of exposure to asbestos. "If you worked in...any...job which exposed you to asbestos dust, you should know that exposure...may increase your risk of developing several diseases." A list of the diseases and their symptoms follows. Persons having such symptoms are urged to see their doctors.

Recently national news programs have reported several instances of serious problems in asbestos-insulated school buildings, particularly in New Jersey.

All of which tends to vindicate an action that I took seven years ago while working as a librarian for a local elementary school. (I must confess that I love to say "I told you so!")

The building had been hastily and cheaply constructed when the new iron mine brought a sudden increase of population in 1961. Portions of it were Quonset hut style, the remainder flat-roofed. It all was lined with an insulating material that was put in place under pressure. A layer of

plaster-like material was put over the insulation.

So great was the urgency that school was held before the building was completed.

We had been in the building about four or five years when portions of the ceiling began falling. It happened most often in the flat-roofed sections, which developed leaks when snow was melting. Custodians complained that children climbed onto the roofs to play during weekends. Also, expansion and contraction of the metal panels were sure to occur. Probably, one or more of these factors contributed to loosening of the insulation.

At times such quantities fell that classrooms were unusable until the custodian had brought his broom and cart to gather it up. I felt that there was much indifference among the school personnel who allowed children to gather the stuff up in their arms as they "helped" the custodian. This went on for several years, until 1972.

The school board and administration seemed to be ignoring the problem. One of



the teachers and I reported the problem to the state Department of Health, which referred the problem to a federal agency. When the agency discovered that the insulation was made of asbestos, the authorities ordered the school closed, immediately.

I was put in "the dog house" by the school superintendent, (a well-meaning man who has since passed away).

Classes from our school were moved to the other two schools and doubled-up two classes to a room. Three or four classes were conducted in the gym. Everyone suffered extreme inconvenience, especially the children. I used my station wagon as a bookmobile, and spent many frustrating hours furnishing library service to the uprooted classes.

During the summer of that year the original insulation was removed from the building and a different type installed — a recycled paper product, heat and fire resistant and possessing good acoustical properties. The cost of the new insulation was \$51,800.

Who was to blame for the fiasco? The architect who designed the building? Or the company that built it? The board that accepted it or the administration that tolerated it? Some people thought I was because I couldn't keep my big mouth shut!

STATE OF WYOMING PUBLIC NOTICE

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 et. seq., WYOMING STATUTES 1967, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (1) ONE COMMERCIAL FACILITY AND (1) ONE OIL TREATMENT FACILITY; TO RENEW (1) ONE MUNICIPAL DISCHARGE PERMIT; AND TO MODIFY (6) SIX MUNICIPAL, (1) ONE OIL TREATMENT AND (2) TWO GOVERNMENT DISCHARGE PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

(1) APPLICANT NAME: EDELL ADDINGTON "ADDINGTON MOBILE HOME PARK"

MAILING ADDRESS: 611 BROOKS AVENUE GILLETTE, WYOMING 82716

APPLICATION NUMBER: Wy-0028185

The Addington Mobile Home Park is a proposed development located south of Gillette, Wyoming, in Section 24, T47N, R72W. The development is projected to have 170 units and wastewater treatment will be provided by an extended aeration package plant. The discharge will be to an unnamed dry draw (Class IV stream) which is a tributary of Caballo Creek (Class II w.w. stream). Because the effluent would have to flow a considerable distance in the dry draw before reaching Caballo Creek (approximately 3 miles), the effluent limitations in the proposed permit emphasize protection of human health rather than for aquatic life. The proposed permit requires the effluent quality to meet national secondary treatment standards and Wyoming's in-stream water quality standards. Self-monitoring of effluent quality is required on a regular basis with reporting results quarterly. The permit is scheduled to expire January 31, 1984.

(2) APPLICANT NAME: J.W. GIBSON

MAILING ADDRESS: P.O. BOX 237 HENDERSON, COLORADO 80640

FACILITY LOCATION: U.P.A. No. 1, NE 1/4, SECTION 27 T16N, R77W, ALBANY COUNTY, WYOMING,

APPLICATION NUMBER: Wy-0027391

Facility is a typical oil treater located in Albany County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Bellamy Irrigation Ditch (Class IV stream).

A letter of beneficial use has been received by an area rancher concerning the produced water discharge at this facility, therefore, the limitations on the chemical parameters (total dissolved solids, chlorides, and sulfates) have been waived. The limitations of 6.5-8.5 for pH and 10 mg per l for oil and grease will still remain in effect for this facility. This Department will continue to evaluate this discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease which must be monitored quarterly. The proposed expiration date is December 31, 1982.

(3) PERMIT NAME: CITY OF EVANSTON, WYOMING

MAILING ADDRESS: P.O. BOX 130 EVANSTON, WYOMING 82930

PERMIT NUMBER: Wy-0020095

The wastewater treatment plant serving the City of Evanston, Wyoming, consists of an activated sludge plant which includes a bar screen, grit chamber, aerator, clarifier, and chlorinator. The discharge enters the Bear River (Class II stream).

The existing permit for this facility requires compliance with limitations which were determined to be secondary treatment standards in September of 1976. Generally, the City has been in compliance with those standards with the exception of the fecal coliform and total residual chlorine limits. An engineering evaluation by this Department has determined that the existing disinfection facilities are inadequate.

Due to this deficiency, the City has now been offered Federal construction grant funds to upgrade the plant. Therefore, it is proposed that the existing permit be modified to include the following:

1. Effective immediately and lasting until completion of upgraded facilities, the plant must meet the same standards as are in the existing permit with the exception of fecal coliform. The limitation on fecal coliform has been removed since any chlorine in the effluent will cause a violation of in-stream water quality standards.

2. Upon completion of the upgraded facility, the plant must meet National Secondary Treatment Standards and Wyoming's in-stream standards for fecal coliform bacteria and total residual chlorine. The limits on total residual chlorine and fecal coliform bacteria are more strict than in the existing permit.

3. Upon completion of facilities designed to meet tertiary treatment standards, the plant must meet a limitation on ammonia which is based on Wyoming's in-stream standard for that parameter.

The proposed permit requires that a schedule of compliance for achieving secondary treatment standards must be submitted on or before June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit.

At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the City to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Self-monitoring requirements in the proposed permit require the monitoring of all limited parameters on a routine basis with reporting of results monthly. The proposed permit is scheduled to expire January 31, 1984.

The City of Evanston has been exempted from meeting Federal effluent requirements by July 1, 1977, since, in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds.

(4) PERMIT NAME: TOWN OF BIG PINEY, WYOMING

MAILING ADDRESS: P.O. BOX 70 BIG PINEY, WYOMING 83113

PERMIT NUMBER: Wy-0020133

The wastewater treatment facility serving the Town of Big Piney, Wyoming, consists of a single cell non-aerated lagoon with no disinfection equipment. The discharge is to the Green River (Class II stream) via an unnamed irrigation ditch (Class IV stream).

The present permit for this facility requires only that the existing facilities be operated at maximum efficiency, however, the Town has now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permit includes limitations on BOD 5, total suspended solids, fecal coliform bacteria, pH and total residual chlorine. A schedule of compliance to meet these limitations must be submitted by June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit.

Due to the extremely high dilution factor in the Green River, it is calculated that ammonia removal is not required. It appears that violations of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1984.

The Town of Big Piney has been exempted from meeting Federal effluent requirements by July 1, 1977, since in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds. The Town also has requested and received the less stringent limitation for total suspended solids which may be granted to stabilization pond systems with a design flow of less than 2.0 MGD.

(5) PERMIT NAME: CITY OF CODY, WYOMING

MAILING ADDRESS: 1338 RUMSEY AVENUE CODY, WYOMING 82414

PERMIT NUMBER: Wy-0020451

The wastewater treatment facilities serving the City of Cody, Wyoming, consist of a 3 cell non-aerated lagoon with a chlorinator. The discharge is to the Shoshone River (Class II stream).

The present permit for this facility requires only that the existing facilities be operated at maximum efficiency, however, the City has now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permit includes limitations on BOD 5, total suspended solids, fecal coliform bacteria, pH and total residual chlorine. A schedule of compliance to meet these limitations must be submitted by June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit.

Due to the large volume of dilution water in the receiving stream, it was calculated that ammonia removal will

dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the City to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1984.

The City of Cody has been exempted from meeting Federal effluent requirements by July 1, 1977, since, in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds. The City also requested, and has received, the less stringent limitation for total suspended solids which may be granted to stabilization pond systems with a design flow of less than 2.0 MGD.

(6) PERMIT NAME: TOWN OF DOUGLAS, WYOMING

MAILING ADDRESS: 130 SOUTH 3RD STREET
DOUGLAS, WYOMING 82633

PERMIT NUMBER: Wy-0020109

The wastewater treatment facilities serving the Town of Douglas, Wyoming, consist of a 2-cell non-aerated lagoon with no disinfection. The discharge is to the North Platte River (Class II stream).

The present permit for this facility requires only that the existing facilities be operated at maximum efficiency, however, the Town has now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permit includes limitations on BOD 5, total suspended solids, fecal coliform bacteria, pH and total residual chlorine. A schedule of compliance to meet these limitations must be submitted by June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit.

Due to the large dilution factor in the receiving stream, there is no need for ammonia removal. It appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1984.

The Town of Douglas has been exempted from meeting Federal effluent requirements by July 1, 1977, since, in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds. The Town also requested, and has received, the less stringent limitations on total suspended solids, which may be granted to stabilization pond systems with a design flow of less than 2.0 MGD.

(7) PERMIT NAME: TOWN OF GREEN RIVER, WYOMING

MAILING ADDRESS: P.O. BOX 127
GREEN RIVER, WYOMING 82935

PERMIT NUMBER: Wy-0020443

The wastewater treatment facilities serving the Town of Green River, Wyoming, consist of an automatic bar screen, comminutor, aerated grit chamber, 2 aerated cells in series, 3 cell non-aerated lagoon and 2 exfiltration basins. This facility was designed to meet National Secondary Treatment Standards and has been in operation for approximately 18 months, however, samples collected during this 18 month period reveal that the facility has consistently failed to meet the Standards. Review of the project has shown numerous design and construction faults. The plant discharges to the Green River (Class II stream).

The Town of Green River has now petitioned the State and EPA for additional funding to upgrade the plant, and this additional funding was granted. In addition, the Town has petitioned the State for a less strict effluent limitation on total suspended solids as is allowed by federal regulations for lagoon systems of less than 2 MGD capacity.

The proposed permit modification allows the less stringent limitation on total suspended solids, and also modifies the permit limitations on fecal coliform bacteria and total residual chlorine to reflect the most recent changes in Wyoming's Water Quality Standards for those parameters. It was determined that Wyoming's in-stream standard for ammonia will be achieved even if there is no ammonia removal at the plant, therefore, the modified permit contains no limitations for that parameter.

The proposed permit contains a detailed schedule of compliance which requires achievement of secondary treatment standards on or before February 1, 1981. Self-monitoring is required on a regular basis with reporting of results monthly. Because ammonia does not appear to be a potential problem, the self-monitoring requirement for that parameter is dropped, however, monitoring requirements for total phosphorus and total dissolved solids have been added. The requirement for phosphorus monitoring is due to the possibility that phosphorus may be causing eutrophication of the upper end of Flaming Gorge Reservoir. The requirement for total dissolved solids monitoring is related to the salinity control program for the Colorado River Basin.

At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

The proposed permit is scheduled to expire on January 31, 1984.

(8) PERMIT NAME: TOWN OF GUERNSEY, WYOMING

MAILING ADDRESS: P.O. BOX 667
GUERNSEY, WYOMING 82214

PERMIT NUMBER: Wy-0021831

The wastewater treatment facilities serving the Town of Guernsey, Wyoming, consist of a single cell non-aerated lagoon with no disinfection equipment. The discharge is to the North Platte River (Class II stream) via an unnamed drainage.

The present permit for this facility requires only that the existing facilities be operated at maximum efficiency, however, the Town has now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permit includes limitations on BOD 5, total suspended solids, fecal coliform bacteria, pH and total residual chlorine. A schedule of compliance to meet these limitations must be submitted by June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit. The proposed permit also contains a limitation on ammonia which is designed to insure compliance with Wyoming's in-stream water quality standard for that parameter. Since the State considers ammonia removal to be tertiary treatment, the achievement of that limitation will be required only if Federal construction grant funds for tertiary treatment are offered.

At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1984.

The Town of Guernsey has been exempted from meeting Federal effluent requirements by July 1, 1977, since, in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds. Also, the Town has requested, and has been granted, less stringent standards for total suspended solids which may be granted to stabilization pond systems with a design flow of less than 2.0 MGD.

(9) PERMIT NAME: TOWN OF LUSK, WYOMING

MAILING ADDRESS: P.O. BOX 385
LUSK, WYOMING 82225

PERMIT NUMBER: Wy-0020036

The wastewater treatment facility serving the Town of Lusk, Wyoming, consists of an extended aeration package plant with no disinfection units. The discharge is to the Niobrara River (Class II stream).

The present permit for this facility requires only that the existing facilities be operated at maximum efficiency, however, the Town has now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permit includes limitations on BOD 5, total suspended solids, fecal coliform bacteria, pH and a prohibition against the discharge of total residual chlorine. A schedule of compliance to meet these limitations must be submitted by June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit.

Because the federal EPA has recently withdrawn the in-stream standard for ammonia for warm-water fisheries, the need for ammonia removal was not assessed.

It appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1984.

(10) PERMIT NAME: CLINTON OIL COMPANY

MAILING ADDRESS: P.O. BOX 3280
CASPER, WYOMING 82601

FACILITY LOCATION: LIGHTNING STATE LEASE
No. 0-5756, 12 & 13-36 BATTERY,
SW4, SW4, SECTION 36, T25N, R66W,
NIOBRARA COUNTY, WYOMING

PERMIT NUMBER: Wy-0025721

This facility is a typical oil production unit located in Niobrara County, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharge is to Lightning Creek (Class IV stream) via an unnamed drainage.

The discharge permit is being modified to simply change the expiration date from 1980 to December 31, 1982. The modification will help spread out the expiration dates of all oil treater discharge permits and will greatly reduce the work load for renewal permits in 1980.

The discharge must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate this discharge and, if necessary, will modify the permit if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease which must be monitored quarterly.

(11) PERMIT NAME: U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

MAILING ADDRESS: YELLOWSTONE NATIONAL PARK,
P.O. BOX 168, YELLOWSTONE
NATIONAL PARK, WYOMING 82190

FACILITY LOCATION: CANYON VILLAGE
YELLOWSTONE NATIONAL PARK

PERMIT NUMBER: Wy-0023443

The U.S. Department of the Interior, National Park Service, operates the wastewater treatment plant which serves Canyon Village in Yellowstone National Park. The facility is a contact stabilization package plant which discharges to the Yellowstone River (Class I water).

Under regulations recently adopted by the State of Wyoming, all waters located within national parks are designated as Class I. Under the Class I designation no existing point source discharger may increase the quantity of its pollutant discharge at any time in the future. Because the existing discharge permit for Canyon Village has only concentration effluent limitations it is now necessary to modify that permit to include quantity or weight as well as concentration limitations.

The weight or quantity limitations contained in the proposed permit were calculated using the concentration limitations contained in the existing permit plus the maximum average flow volume reported during the past three years (.56 MGD).

The proposed permit includes a modification of the self-monitoring section to require more frequent monitoring of effluent quality, though reporting of results will remain on a quarterly basis. The permit is scheduled to expire July 31, 1983.

(12) PERMIT NAME: WESTON COUNTY, "NORTHEASTERN
WYOMING RECREATION CAMP" (CAMP
MALLO)

MAILING ADDRESS: P.O. BOX 69
NEWCASTLE, WYOMING 82701

PERMIT NUMBER: Wy-0021474

The wastewater treatment facilities serving the Northeastern Wyoming Recreation Camp (Camp Mallo) consist of an extended aeration package plant with a chlorinator. The discharge is to Stockade Beaver Creek (Class II stream).

The present permit for this facility requires only that the existing facilities be operated at maximum efficiency, however, the camp has now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permit includes limitations on BOD 5, total suspended solids, fecal coliform bacteria, pH and a prohibition against the discharge of total residual chlorine. A schedule of compliance to meet these limitations must be submitted by June 1, 1979. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit. The proposed permit also contains a limitation on ammonia which is designed to insure compliance with Wyoming's in-stream water quality standard for that parameter. Since the State considers ammonia removal to be tertiary treatment, the achievement of that limitation will be required only if Federal construction grant funds for tertiary treatment are offered.

It appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the camp to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire January 31, 1984.

The camp has been exempted from meeting Federal effluent requirements by July 1, 1977, since in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds.

STATE — EPA TENTATIVE DETERMINATIONS

Public comments are invited any time prior to March 12, 1979. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permits Section, Hathaway Building, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to March 12, 1979, will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307)-777-7781, or EPA, (303)-327-3874, or by writing to the aforementioned addresses.

The complete applications, draft permits, and related documents are available for review and reproduction at the aforementioned addresses.

16-High Country News — Feb. 9, 1979

Political savvy helps Ralph Maughan save trees

by Joan Nice

Some people are surprised to hear that Ralph Maughan, one of Idaho's most dedicated wilderness advocates, doesn't consider himself an environmentalist.

As Maughan defines them, environmentalists believe that the world and its community of life are more important than human beings. "My primary interest is people," he says. Maughan, a professor of political science at Idaho State University in Pocatello, calls himself a "conservationist" and "a hard-headed empiricist, a utilitarian and a naturalist."

"I'm interested in using natural resources," he says, "but that doesn't mean I want to cut down the forest. Wilderness has a value to man that grows as the supply shrinks. Much of the timbering in the Northern Rockies is not a wise use of the forest. It is often developed at a economic loss."

Maughan was raised a Mormon in southern Idaho and northern Utah. A friend on the Idaho Environmental Council considers him a moderate conservationist: "I'm the hard nose and Ralph's a compromiser. He just hangs in there and keeps talking to the agencies and the politicians. I get worn out much sooner."

A Forest Service planner who has worked with Maughan says, "He's a very, very strong advocate for wilderness protection. He's always been highly critical of our planning efforts." When asked if Maughan made reasonable demands on the agency, the planner said, "He's getting more reasonable than he used to be."

At Idaho State, Maughan teaches courses in public opinion, interest groups, and politics and natural resources. He is also wilderness chairman of the Idaho Environmental Council and founder of the Lost Rivers-Lemhi Range Wilderness Council.

Maughan says that many of his allies on wilderness issues have moved to the state fairly recently. For longtime residents, "It's hard to get a national perspective. You forget that the whole country doesn't have as much roadless land as Idaho."

Four years in graduate school in Madison, Wis., "completely changed my view of things," Maughan says. "I was development-oriented. I assumed things would stay the way they were. Then I saw Wisconsin, which had been raped around the turn of the century. I started to realize that it's a loss of freedom when you can't walk where you want to, when you have to drive hundreds of miles for a wilderness experience. People who say we should sell the public lands should go East for awhile."

A tall, reticent, light-haired man in his mid-thirties, Maughan loses his reserve when the conversation touches on his favorite topic — the politics of wilderness preservation. Overall, he was badly disappointed with the Forest Service's second Roadless Area Review and Evaluation (RARE II). He and his allies won one small corner of the battle, however, on the Lost Rivers and Lemhi ranges northwest of Idaho Falls. A majority of the people who wrote to the Forest Service about these areas favored wilderness designation. In fact, 81 percent of the respondents favored wilderness designation for the state's highest peak, Borah, in the Lost River Range. About 78 percent favored wilderness in the Lemhi Range.

Partly as a result of this show of support, several areas in the ranges that had been recommended for "non-wilderness" by the

Forest Service in RARE I were "rescued" at least temporarily by RARE II and put into a "further planning" category. In addition, the Forest Service recommended Borah Peak for wilderness designation.

In the preceding months, Maughan and other conservationists in the state surveyed roadless areas, read documents, attended meetings, gave speeches and generally stirred up interest in the Forest Service process. When the timber companies handed out wilderness opinion forms to their workers to send to the Forest Service, Maughan's group retaliated with its own response forms, distributed among wilderness sympathizers.

"I was surprised at how much public support there was for wilderness in the Lemhi and Lost River ranges," Maughan says.

On RARE II, and on many other issues, conservationists have "progressed incrementally," Maughan says. "We made some rapid gains in the 1968-75 period. And we're still gaining, but more slowly. We'll probably nibble on most of these issues forever. Some we can chew on for 20 or 30 years and digest slowly."

But RARE II is "indigestible," Maughan says. A wilderness survey that proceeded



Ralph Maughan

RALPH MAUGHAN: "My primary interest is people."

technical competence and 90 percent politics," Maughan says. "We often know what should be done, but it's another matter getting it done."

Maughan says that since the 1930s, party politics has been giving way to interest group politics in the United States. "The parties don't stand for anything anymore. They're both falling apart."

"The parties can be seen as tools for building large-scale coalitions," he says.

Conservationists should become more involved in politics, Maughan says. "Run for office or contribute money to a candidate. It only takes \$10 for a legislator to remember your name and give you a fair hearing. Invest \$30 to \$40 in a campaign for the state legislature. That's where we're weak."

Or, Maughan suggests, work for a conservation group — get involved in interest group politics — "That's where it's really at." Maughan has been working in this arena for several years "building a consti-

tuency for wild places," among other things.

"The Grand Canyon fight was much easier than the Dinosaur National Monument fight, for instance, because Grand Canyon had a larger constituency," Maughan says. "Take people out in the wilderness."

A number of interest groups each pulling the nation's leaders in a different direction tends to result in a stalemate, according to Maughan. "The political system is incapable of coming up with comprehensive policy on any major issue," he says. "Take the national energy bill for instance. Or RARE II."

Another factor which may hinder conservationists is the tax revolt. Maughan says, "It hurts conservationists and environmentalists indirectly. It puts people in office that tend to be hostile to their views. If the revolt continues, it could result in a loss of ground."

"However, we can jump on the bandwagon by using tax revolt rhetoric and gain control of it," Maughan says. "Rather than talking about saving the environment we can talk about saving tax dollars by stopping deficit timber sales and wasteful water projects."

"Whether conservationists have enough political talent to do that remains to be seen," Maughan says.

He says conservationists in the West should work to destroy myths that create a split between urban conservationists and rural people. "Somehow we have to convince rural people that we are not anti-hunting, not anti-livestock and not anti-timbering — unless the lumbermen are getting a government subsidy."

"Conservationists are the true conservatives, not the developers," Maughan says. Most political conservatives concentrate on preserving economic freedom while they ignore the need to defend the freedom of the hills, he says. "Wilderness is of no value to savages, but when civilized people can use it for a week or two to recharge their batteries, it becomes very valuable," he says.

Maughan says he intends to spend the rest of his life pushing for wise use of natural resources. "For me, life isn't sitting around a swimming pool or making a lot of money. You can't just work for five years and expect your political problems to be solved. Politics never goes away."

"RARE II is indigestible."

more slowly — say three or four areas at a time — would have produced better results, he believes. A few wildernesses would have been lost to development in the interim, "but the side that stands to lose the most by delay is the timber industry," Maughan says.

Conservationists who were upset with RARE II may also be disappointed with Congress' final decisions on roadless areas, Maughan says. Part of the reason for conservationists' slow progress on wilderness and other issues recently has to do with major political trends, Maughan says. "Wise use of natural resources is 10 percent



Eavesdropper

environmental news from around the world



TIGHT BUDGET: Of the federal natural resources agencies, the Forest Service would be hardest hit by the Carter administration's proposed budget cuts for fiscal 1980. Carter proposed a Forest Service budget of \$1,490 million — a cut from fiscal 1979 of \$272 million. Carter also proposed a drop in the National Park Service budget from \$530 million to \$501 million. The Bureau of Land Management drew a slight increase as did the Environmental Protection Agency. Agencies dealing with water development projects drew recommendations for the largest increases. Carter wants the Corps of Engineers' budget up 15 percent and the Bureau of Reclamation's up 29 percent over last year. The administration had been warning various interest groups that the need to fight inflation meant that many government programs would have to be cut. "Perhaps

the best that can be said for the Carter administration's proposed fiscal 1980 budget is that it could have been much worse," an editorial writer in the National Wildlife Federation's *Conservation Report* said.

EAGLES BLOCK REFINERY. On the grounds that nesting bald eagles would be disturbed, the Environmental Protection Agency has denied a pollution permit required to construct a \$700 million oil refinery planned for the coast of Maine. The refinery's potential impacts "could not be avoided or mitigated by any means short of denial of the permit," according to EPA. The bald eagle is classified as an endangered species by the U.S. Fish and Wildlife Service. The project, proposed by the Pittston Corp., would have included a 250,000 barrel-per-day refinery and an oil tanker terminal in Eastport, Maine.

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