Sierra Club Bulletin
APRIL 1966

PHILIP HYDE: Yukon Flats, which would be drowned by Rampart dam.

Alaska's Economic Rampart?

Nowhere in the history of water development in North America
have the fish and wildlife losses anticipated
to result from a single project been so overwhelming

—U.S. Fish and Wildlife Service

See page 17

NEWS OF CONSERVATION AND THE CLUB

Cheap western coal may doom plans to build dams in Grand Canyon, says FPC *Digest*

The News Digest, published by the Federal Power Commission, cites a report drafted by Robert R. Nathan Associates for the Interior Department's Office of Coal Research that "suggests coal-produced power will be so much less expensive than electricity produced by southwestern dams that Congress could never approve the costly dams."

Olympic National Park more heavily visited last year than Yosemite

Figures released by the National Park Service on park visitations are of particular interest in view of efforts to truncate Olympic National Park. Visitors to Olympic increased from 1,343,600 in 1964 to 2,058,000 in 1965. It had more visitors than Yosemite (1,635,400), and almost matched Yellowstone (2,062,500). Nevertheless, President Philip Zalesky of Olympic Park Associates (2433 Del Campo Drive, Everett, Washington 98201) warns that the proposal to carve chunks out of the park remains a threat.

Water pollution control has political sex appeal

Voters of New York State want water pollution curbed, and they are willing to pay for it. The water pollution control bond issue approved in the last election was the biggest bond issue ever proposed in the state (one billion dollars) and it passed by the most decisive majority ever recorded (4-to-1). Voters were not simply in a good mood; they slapped down two smaller bond proposals for public housing by large margins.

Volunteers needed for special task forces to survey Wyoming areas

The club is seeking recruits to survey areas in Yellowstone National Park and the Stratified Primitive Area (about 20 miles southeast of the park in the Absaroka Range) to evaluate their suitability for reclassification as Wilderness Areas under the Wilderness Act. Participants' expenses will be paid. Those interested in serving with the survey task forces should write to Conservation Director Michael McCloskey at club headquarters.

Russians hear about club and its opposition to dams in the Grand Canyon

Postcript of letter from Richard Osborne, Treasurer of the Pacific Northwest Chapter, to Conservation Director Michael McCloskey: "One is likely to hear about the Sierra Club almost anywhere now. This morning, while listening to the Voice of America Russian language broadcast to the Soviet Union, I heard a commentary on David Brower and the Club Sierra's opposition to Marble Gorge and Bridge Canyon dams in Grand Canyon. Perhaps in the near future there will be a Great Bear Chapter based in Moscow." To date, however, no membership applications have come in.

Kentucky acts to limit strip mining devastation

Against virulent opposition by the coal mining industry, Kentucky legislators outlawed some strip mining practices and ruled that operators would have to return land to its original contours. (An improvement on the unbridled havoc wrought with legal sanction until now, but will there be any topsoil on the regraded contours?) Kentucky hopes that it will be joined in an interstate compact by other strip mining states. Would a tough federal law be too much to expect? Of all ways man has devised to rape the land for private profit, strip mining is surely one of the most totally indefensible.

Wisconsin eliminates bounties, substitutes habitat improvements

The $180,000 that Wisconsin has budgeted annually for futile and harmful predator control programs will hereafter be spent instead on positive programs of habitat improvement. As the Wildlife Management Institute points out, "the amount and kind of habitat—not predator numbers—have the greatest influence on wildlife abundance."

New England states pioneer in preservation of tidal wetlands

Massachusetts and Rhode Island have enacted laws enabling these states to zone privately owned tidelands for ecological purposes and to prevent dredging and filling. New York has a law providing for state aid to local governments for the purchase of wetlands. And Congressman Lester Wolff has introduced a bill to provide federal assistance to Connecticut, New York, and Rhode Island in the preparation of a master plan for the conservation of coastal lands bordering Long Island Sound.

Hopes are high for an Indiana Dunes National Lakeshore

Indiana Congressman J. Edward Roush has introduced H.R. 51, similar to a bill already passed by the Senate, for an Indiana Dunes National Lakeshore. Local conservationists are urging that letters favoring H.R. 51 be sent to: Congressman Ralph J. Rivers (Chairman, Subcommittee on Parks and Recreation), to Congressman Wayne Aspinall (Chairman, House Interior Committee), to Congressman Roush, to your own Congressman, and to President Johnson (who has advocated an Indiana Dunes National Lakeshore).

Consolidated Edison considers burying its proposed powerplant at Storm King

Consolidated Edison is reported to be studying the feasibility of putting its proposed powerplant at Storm King Mountain on the bank of the Hudson underground, on the theory that this would dispel objections to the project. Assuming that an 800-foot-long powerplant could be blasted out of the rock without permanent damage to the scenic and historic site, other features of the project would remain as objectionable as ever. Striped bass spawning grounds would be threatened with destruction; the pumped storage reservoir would drown established hiking trails; overhead transmission lines would slash through scenic landscapes and suburban communities. . . . Instead of burying the powerplant, Con Ed should bury the whole Storm King project.

Justice Douglas leads Atlantic Chapter hike along the Hudson River

The one Sierra Club member who can be depended on to make page one news by taking a walk is Supreme Court Justice William O. Douglas. His hike along the C&O Canal, to dramatize its recreational and park values, became an annual event that draws throngs of walkers and newsmen. When there was danger of a highway along the Olympic ocean strip in Washington State, he again dramatized a conservation issue by leading a hike there. On March 6, Justice Douglas led more than 200 people on an Atlantic Chapter hike along a part of the Croton Aqueduct right of way, which conservationists hope will become a footpath-park 32 miles long and 66 feet wide. The event was fully covered by *The New York Times,* the *New York Herald-Tribune,* the *New York World-Telegram and Sun,* and *Sports Illustrated.* The photo showing Justice Douglas walking along the Hudson shore with Sierra Club Executive Director David Brower is printed with the permission of The Bergen Evening Record Corporation, Hackensack, New Jersey.

Let Us Raise a Standard

"I would like to make some observations which may prove provocative," said Russ Neugebauer, Assistant Chief of the Conservation Education Division of the National Wildlife Federation, in an address to the 12th Annual National Conservation Conference. So far as we are concerned, he succeeded admirably; we are provoked.

"Preservation versus Multiple Use" was Neugebauer's topic, and in his speech, preservation comes out a poor second. "Getting down to practicalities," he cast doubt on the likelihood that Congress would pay the price of a real redwood national park. The proposal for an enlarged San Rafael Wilderness Area "lends credence to accusations that we conservationists really don't believe in multiple use at all." Because of conservationist positions on the North Cascades, Marble Gorge dam, the Wild Rivers System, and pollution control, "we are being classified as 'crackpots' on the lunatic fringe who, like the Ku Klux Klan or Nazi Party members, are more often tolerated than honestly regarded."

Neugebauer concluded that "we must be realists—as well as idealists. We must discuss our programs and projects with the policy-makers and determine what may be practical—and then inform the people. After evaluation, some compromises well may be in our best interests. If we continually ask for the moon we might wind up with nothing at all. . . . We have won many points during the past few years. More victories lie ahead—if we stand united on reasonable positions and make reasonable requests."

Granted that Neugebauer is pure in heart, his words raise questions about the rationale and propriety of being "realistic."

When a policy is based on principle, it is sometimes inconvenient or impossible to attack it on its merits. The thing for an opponent to do in that case, of course, is obvious: appeal to "realism," to "practicality," and to sweet reason—and hope that no one will notice that principle is getting lost in the shuffle. When you hear the words "let's be realistic," the chances are at least ten to one that the speaker seeks to undermine a policy without frontally attacking the principles on which it rests.

Even when the appeal to "realism" is something more than a mere tactical device, it is seldom constructive. The true realities or practicalities of a situation are rarely clear enough to produce consensus. "Let's be realistic" may be translated "let's do what seems realistic *to me*." In a complex and uncertain world, it pays to be suspicious of the superior knowledge of reality that self-styled realists impute to themselves.

Too great a preoccupation with "reality" produces a sterile, self-defeating program of inaction or insufficient action. And realists overlook the fact that reality can be changed by men who are determined to change it—by Galileos and Newtons, by Columbuses and Verrazanos, by Leonardos and Edisons, by Washingtons and Bolivars. The world owes most to men with firm convictions and the determination to reshape reality. Not that they invariably succeed, but at least they do not defeat themselves.

America's Founding Fathers, in convention assembled, were so pessimistic about the likelihood that 13 independent states would accept a common government that many advocated something less. Washington put a stop to that. If they proposed less than they themselves believed to be sufficient, he asked, how could they defend their work? Then: "Let us raise a standard to which the wise and the honest can repair; the event is in the hands of God." Remembering that to a considerable extent reality is what we make it, *let us raise a standard.*

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. . . TO EXPLORE, ENJOY, AND PROTECT THE NATION'S SCENIC RESOURCES . . .

FRONT COVER: Yukon Flats, an area that may be saved from the threat of Rampart dam by the disinterested Spurr study (see page 17). BACK COVER: Redwood Creek, an area that may be lost because of an aberration of the Johnson Administration (see page 14).

CONTENTS

*THE SIERRA CLUB,** founded in 1892, has devoted itself to the study and protection of national scenic resources, particularly those of mountain regions. Participation is invited in the program to enjoy and preserve wilderness, wildlife, forests, and streams.

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Report from an Amateur Tree Farmer

by Brooks Atkinson

After retiring as drama critic of The New York Times, *Brooks Atkinson began a new career as a widely syndicated columnist. His columns have often shed light on conservation issues such as the threats to the Grand Canyon and the California condor. Very few Sierra Club members are as widely known as Mr. Atkinson—and it is probably safe to say that he is the* only *member for whom a Broadway theater has been named. When last heard from, Mr. Atkinson was eagerly setting out to reëxplore redwood country and to research a story on the California condor. With this essay, we introduce a series of guest columns.*

IN FORTY YEARS the citizens of New York have planted more than 360 million trees from the Conservation Department's stock. I am one of those citizens. My share of the 360 million is subtle—about nine thousand red pines and ten thousand black spruces that cover seventeen Catskill Mountain acres. As a tree farmer I am so small as to be virtually invisible, and my problems of weeding, thinning and pruning fall into the category of dooryard gardening rather than forest management.

But I discovered at a solemn conference on trees in Albany, N.Y., that I belong to an emerging class of tree planters who value association with trees above money. Although we are amateurs, we are true believers. One of the conference speakers was a genuine tree farmer who would like to show a profit on his investment if that were possible. So far that has been impossible. But he spoke for me and other amateurs when he said: "There is a growing need for reflection and philosophy, and a dwindling environment in which to nurture these things." He concluded on a note of uplift in a vein I find congenial: "Be thankful you still have a corner on tranquility," he said.

After listening to him I resolved never to cut my trees—a very sensible resolve because there are not enough of them to pay the cost of cutting. "Harvesting" would be a more ingratiating word, like "harvesting the annual crop of deer." The word "harvesting" avoids the unpleasant connotation of death.

Since I have no plans and no ambitions, I felt smug when representatives of the lumber companies and of hunting clubs made some acid comments on the "Forever Wild" status of the New York State Forest Preserve, established in 1885. Sixteen and one-half percent of New York's forested areas are within the Forest Preserve and cannot be leased, sold, exchanged or taken over by public or private corporations, nor can the timber be removed or destroyed. New York State owns sixty percent of New York's prime, virgin timber.

To judge by the remarks of conference speakers interested in improving nature, the trees in the Forest Preserve do not appreciate what the state constitution has done for them. They have coarse habits. They get and transmit diseases. They die and fall. "Forever Rot" is one industrialist's version of the principle of "Forever Wild." Any educated forest manager could keep them in better order if the state constitution permitted him to cut and prune, eliminate weed trees (like maple, birch, beech, aspen, pincherry, perhaps red oak) and otherwise control the forest scientifically. The Preserve has become such a shambles that it no longer supports a decent game population, and hunters tend to shoot over private lands (including mine) to harvest their deer, bears, rabbits, squirrels and grouse.

As a bird watcher, I agree that the wilderness is not a rich haven for wildlife. There are more birds of more species on the edges of woods, in pastures, orchards and dooryards. If professionals were permitted to manage the Forest Preserve they could easily control wayward growth of weed trees by poisoning them with chemical weed killers—a cheap, swift, convenient, efficient, almost miraculous method of controlling not only trees, but birds, animals and nature in general, including human nature. Death is just a few drops away.

I listened to the growling of the experts with sardonic satisfaction. For the people of New York State—most of whom rarely see a tree except in city parks—are not going to remove the "Forever Wild" provision from the state constitution. They may not know very much about forest management, but they instinctively resist the spread of the managerial virus. It gives them a sense of confidence to know that the citizens of the state can frustrate tycoons. In the Forest Preserve, trees can live and die without expert supervision and the streams cannot be polluted by technologists.

Ian McMillan, rancher of Shandon, California, thinks that "let it alone" is the basic principle of conservation. If you improve on nature in one respect, nature takes reprisal in another. To save the wheat crop, you kill the ground squirrels with 1080 and the coyotes die from secondary poisoning or they leave the area. When the coyotes disappear, the deer multiply and gorge themselves on the rancher's wheat. Mr. McMillan does not believe that "let it alone" is a method that solves all problems, for as mammals we have to reconcile our needs with nature's system. If we adhered to "let it alone" as a sovereign principle, there would be no culture or civilization—two things I am unwilling to abandon. But "let it alone" does coincide with the Greek principle of tragic irony, which is, I think, the sovereign principle of life. For every advance there is a retreat. You lose as much as you gain. The Lord giveth and the Lord taketh away.

And so I am happy with the inefficient enclave of the New York Forest Preserve and with all national parks and primitive and canoe areas and with everything in America that is not managed for a profit. I cannot reflect or philosophize in my spruce lots because I lost control of them during the years I spent overseas in World War II. They quickly became a ferocious tangle; locust, ash, maple and thorn apple have stifled many of the spruces.

Although I would rather reflect and philosophize among the redwoods and sequoias, to say nothing of the Douglas firs and ponderosa pines, I frequently reflect and philosophize in the red pine lot where the grouse nest and the deer pass. And I am encouraged by the fact that more trees grow in New York State now than in 1900, and many more will be growing in the year 2000.

There will also be more citizens then. More of them will own corners on tranquility, which, in turn, they will need more desperately than we do today. ■

Falls of the Carrao are near our Canaima camp in Venezuela. We'll spend a week in this region with Paul Schwartz, recorder of bird songs for Columbia University, on hand to interpret the flora and fauna.

1967 Outing into Tropical and

ALTHOUGH THERE IS NOTHING in these pictures to show it, the club's 1967 outing to northern South America will start high — first, after a day in Caracas, in the 9,000-foot cloud forest of Henri Pittier National Park, and then on up into the 16,000-foot Venezuelan Andes.

Slated for early January and limited to 40 participants, the outing will get under way with a Pan American jet flight to Caracas. After the "shakedown" day there, with the beautiful seaside Macuto-Sheraton Hotel as headquarters, the party will separate into two groups for the Venezuelan portion of the trip, so as not to overtax the limited facilities at some of the stops, and to make maximum use of our chartered coach and DC-3. One group will head for the high Andes country first; the other will begin with the *Gran Sabana* and cover the first group's itinerary in reverse. Then the party will unite again in Caracas.

Although this outing will get you into wonderful places that Lowell Thomas and even Jack Douglas never heard of, you will always have the choice of being as intrepid or as lazy as you please. Our camp at 15,000 feet on Pico Espejo will be reached by the world's longest, highest aerial tramway. There, with our hosts of the Andean climbing club of Merida, we can get in some glacier-climbing to the 16,427-foot summit of Pico Bolivar, Venezuela's highest point; go on muleback to the isolated, unspoiled colonial village of Los Nevados; or just stay put and study the alpine flowers.

We fly to the exquisite land of sawgrass-and-palmetto prairies, crystal-clear rivers, and sky-piercing pink-and-green mesas veiled with gauzy waterfalls—in southern Venezuela. There we'll have nearly a week, with Paul Schwartz — noted ornithologist and recorder of bird songs — as our mentor and guide, and plenty of time for some of the best birding, walking, orchid hunting, and swimming in the world. Some members of the party will have the chance to go by canoe to the very base of Angel Falls, 3,212 feet high — altogether a six-day river trip. (See the *National Geographic* for March, 1963.)

From Venezuela, we move on to Trinidad and the vast bird sanctuary of the Caroni Swamp. Then we head for Georgetown, British Guiana, base for our expedition to huge Kaieteur Falls on the Potaro River. We reach a guest house on the river by truck, then proceed upstream by steamer to the head of navigation below the falls, and take a foot trail up to the orchid-festooned canyon rim and on to the very brink of the sheer 740-foot fall.

Returning downriver to an airstrip, we fly to a remote cattle and guest ranch on the high savanna virtually in the shadow of Mount Roraima — Conan Doyle's *Lost World*—and after an overnight stay we continue to Orinduik,

Photos and text by Clyde Thomas

We'll see Angel Falls, world's tallest, from the air; some will canoe to it.

A walk on the Lost World, where howler monkeys sound like distant thunder.

We'll explore Surinam jungle rivers in 40-foot dugout canoes of Bush Negroes.

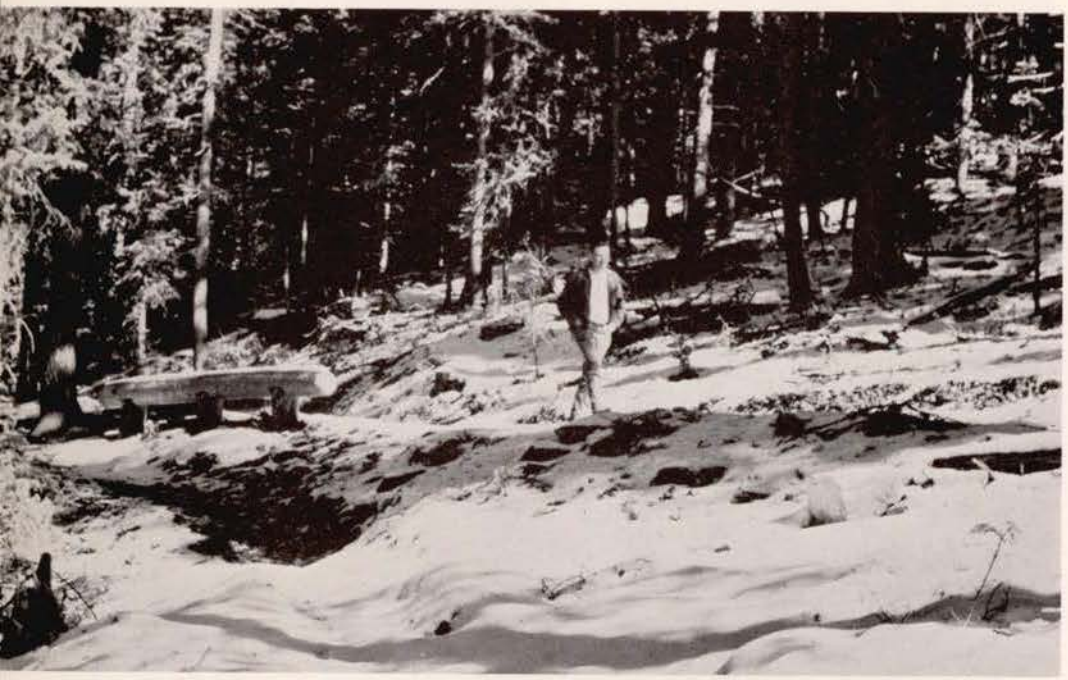
High-Mountain Wilderness of South America

where there's a waterfall much like Niagara, and eventually return to Georgetown. Members who take the three-week tour will return home.

Those who have taken the optional fourth week will stop next at Paramaribo, Surinam. From there we go by dugout canoes up the Marowijne River, dividing Surinam and French Guiana, into the gorgeous jungle domain of the primitive Bush Negroes, who live the pristine African life you can't find in Africa any more. After three days of the most exquisite tropical forest and river scenery in the world, we return to Paramaribo, Curaçao (for a last shopping spree), and home.

The cost of this outing, now being worked out, will be announced later, as soon as details become available. We'll camp part of the time, occupy good hotels where appropriate, and discover some of the most charming country inns and rest houses you can imagine. A deposit of $100 is nonrefundable unless your place on the trip can be filled. For further information write % the Sierra Club to Alfred Schmitz, who will handle correspondence. Leaders: Martin and Esther Litton, and Alfred Schmitz. ■

The Grand Savanna of the Guianas and Venezuela is palm dotted and river laced, with skies full of brilliant birds.



Hiker strolls 120 feet to gain four feet in elevation on over-engineered Trampas Trail, Pecos Wilderness Area, New Mexico. Note massive barrier intended to discourage shortcutting. Photo by Stanley E. Logan.

Southwestern Supertrails

by Jeffery Ingram

A FIRM BOUNDARY and a stout guard would seem the only necessities for maintaining a Wilderness Area, easing the Forest Service's task of allowing a wild area to stay in its undeveloped primitive condition. Not so. Developing trail systems, directing traffic to certain natural campsites that can be provided with facilities to lessen impact on the land, controlling grazing by pack animals, and distributing visitors in time and space are also applicable techniques for managing wilderness. Particularly since "paradoxically, wilderness visitors usually travel in groups in their quest for solitude and remoteness." (Ag. Info. Bull. 301, p. 52.) This paradox is made more intense for the Forest Service because it believes that a wilderness area is "dedicated to those who enjoy America's remaining untouched and unspoiled beauties. . . . Simple trails provide for foot and horseback travel. . . . It is the primary objective to keep the area in its undeveloped primitive condition." (US FS folder on High Uintas Primitive Area.)

The Forest Service, of course, revels in the paradoxes of multiple-use management. Unfortunately, the mental gymnastics involved in resolving paradox are not always well suited to the biological denseness of the land or to the complexities involved in people's desires. Nevertheless, the Forest Service tries. The construction of trails in New Mexico forests provides an example of initial failure by the Service, followed by public protest, and eventually, a finding by the Forest Service that it is possible to construct trails that obey the law of the land rather than impose on the land an entirely new constitution.

The case is not closed. However, evidence at present is far more favorable than it was almost two years ago when a newspaper article started the controversy. The report was of trail construction bids for the Pecos Wilderness northeast of Santa Fe. The construction would entail an eight-foot-wide corridor cleared of "all trees . . . and all other materials determined objectionable by the Engineer," including stones over two inches in diameter. Metal culverts were mentioned. Knowing the area, Stanley E. Logan and Norman R. Bullard of Albuquerque were concerned enough to go look at the areas, and then, appalled by what they saw, to go work on the Forest Service.

Some of what they saw is shown in the photographs. Along the Trampas Trail on the west side of the Pecos, a good existing trail that was being "brought up to a higher standard," 3,-300 trees were marked for cutting in a five-mile stretch. On this trail and a new one being carved out along the west fork of the Santa Barbara, metal culverts were to send water under the people while elaborate, not always necessary bridges routed the people above the water. Pleasantly undulating trails were being smoothed, then provided with uniform drainage dips. Switchbacks were constructed with approaches 100 feet long, turns 19 feet wide, and rises as small as four feet. Naturally, with such small rises, barriers had to be constructed to force travellers to say in the trail. Given such specifications, the result was bound to be monotonous trails, open even in the forest, which give the traveller a feeling that he is just head of the power-line crew.

Such a developed system of specifications does not lead to simple trails. Nor could the goal of economy have been served, since the requirements put a premium on flat, overly-long trails and payment for construction is based on the length of the trail. Such complicated, large-scale works would seem much more difficult and costly to maintain, for they attempt to regiment the land rather than coöperate with it. Of course, maintenance can be mechanized, and in many cases the trail specifications seem to be aimed at making mechanized maintenance possible, though this is certainly neither the easiest nor the most economical method of keeping trails up.

Further, the original Trampas Trail had been of ample width and ease for horses and mules, so making the wilderness accessible for pack trains could not have been the purpose of such reconstruction. Protection of the wilderness

boundary was surely not the reason, since invasion has been made far easier for jeeps, scooters, small cars, wagons, bicycles, tricycles, wheelchairs, motorized ski sleds, and other assorted vehicles.

Erosion control has the sound of being a proper justification, except that many of the devices aimed at channelling water are ineffective. For instance, a culvert intended to send a stream harmlessly under the trail apparently induced the water to alter its course so that it could pour directly onto the path. Of course, shallow switchbacks tempt users to cut across, creating new courses for water and negating the elaborate system of ditches and grading. Some of the devices used to help people across shallow streams seem better designed to trap debris, forcing the water to flow out over the trail.

Whatever the reason for such "high-standard" specifications, the results, both in the Pecos Wilderness and in regular forest areas, led to immediate protest to various levels of the Forest Service and the New Mexico congressional delegation through the summer of 1964. The attack on these highway-type trails culminated in a slide presentation by Norm Bullard in November 1964 at the Rio Grande Chapter's Santa Fe conference on southwestern natural areas. The audience was angered, and a heated discussion followed with the Forest Service officials present.

The critics, led by Stan Logan, Conservation Chairman of the New Mexico Mountain Club, were not reassured. Determined that the matter should not end with the conference, they spent the next several months taking pictures of the damage caused by construction and the bad disposal techniques of the contractors. They prepared their case so that if construction in 1965 continued as in the previous year, a well documented national appeal could be made against the outrage. In September 1965, feeling they were ready, they addressed 26 queries to the Southwest Regional Forest Service Office in Albuquerque. The response was encouraging. The Regional Forester suggested that a meeting be set up to discuss trails and other matters, and enclosed trail construction specifications revised as of April 1965.

These new specifications reduced the cleared corridor width by one foot and the trail tread by one to one-and-one-half feet. The tread could weave within the corridor so that live trees larger than 12 inches in diameter could be left standing — though this is not mandatory. Switchbacks have been steepened, narrowed, shortened — but apparently not enough to allow giving up the erection of barriers. The artificially uniform drainage dips remain, as does a requirement that stream beds with only intermittent flow be approached at a given grade (10 percent under the new specifications) rather than as suits the contour. The burden of making a good forest trail still falls, of course, on the knowledge and sensitivity of individual rangers, contractors, and citizens.

In addition to revision of the specifications, specific examples of new and better trails were given at the meeting to show the Forest Service's good intentions. One of these, the Sawyer Peak Trail in the Black Range of Gila National Forest, was inspected by Sierra Club members and found to be a great improvement. Winter has since closed down other projects, but at the turn of the year, a period that had started in anger had ended in wary optimism.

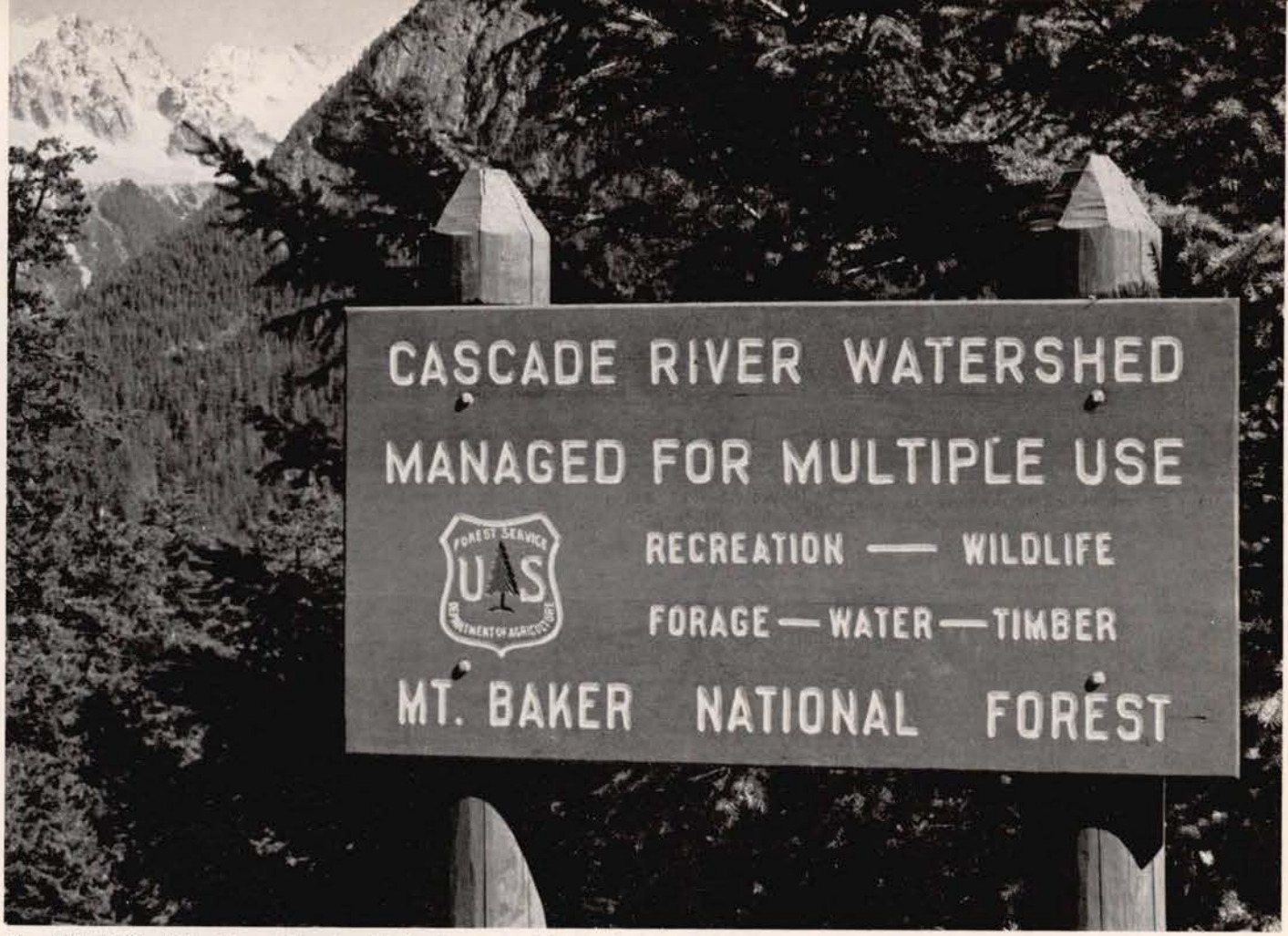
Since it is in the grip of the idea that it must continue to construct trails to provide for rapidly increasing use, the Forest Service will continue to offer opportunities to test out the promise of the revised specifications. In New Mexico, current construction techniques can be viewed in the Pecos, White Mountain, and Gila Wilderness Areas. In Arizona, Coronado and Prescott National Forests and Superstition and Mazatzal Wilderness Areas provide examples. (Details may be requested from the Forest Supervisors.) With the increased sensitivity of the USFS Southwest Regional Office to trail standards, informal oversight by the public can have immediate impact. Starting this summer, the scope of this impact can be widened because the trails scheduled for "up-grading" and construction will be known for the entire country.

There are certain items in trail construction that the hiker or rider can watch for. The location of the trail is of course the most important single item, and should be looked at with these questions in mind: What alternative routes are there? Which would provide the most pleasing trail? Which path would do the least damage to the land? Trees that are going to be cut and rocks that are going to be excavated will be marked—do they have to go? Should the trail be routed around them? Does it appear that the cleared corridor is unduly wide? Are trees far off the trail marked for cutting? Where the trail crosses a watercourse, is the construction over-elaborate or self-defeating? Will the grading and placement of switchbacks give the traveller the feeling of being on an endless treadmill?

Unlike sidewalk superintendents, trailside superintendents in our national parks and forests have the opportunity to make their opinions count. ■

Jeff Ingram, author of the preceding article, is the Sierra Club's new Southwest Representative. Working out of Albuquerque (725 17th Street, N.W.), New Mexico, he will cover Arizona, Colorado, New Mexico, and Utah, as well as parts of adjoining states — an area with more than its share of conservation issues.

After receiving a B.S. in mathematics and government from M.I.T., Ingram worked toward a Ph.D. in metropolitan government and politics at Columbia. He was active in the First Assembly District (N.Y.) Republican organization in 1961–2, during which time he was a field investigator for the state Department of Labor. Moving to New Mexico, he worked from 1963–65 as a mathematician on the nuclear rocket project of Los Alamos Scientific Laboratory. In addition to his work as Southwestern Representative of the club, he is working toward an M.S. in mathematics. Ingram has a wife, Helen, and two children.



Roadside P.R. of the Forest Service. Under "managed for multiple use," some vandal with a heart of gold has inscribed these words: "Pure propaganda!!! This kind of a scene should be preserved for the people to enjoy." Photo by John Warth.

P. R. in the Forests

by Grant McConnell

Among "general interest" magazines, The Nation *has been outstanding in its coverage of conservation issues. The article that follows is reprinted with permission from* The Nation *of December 27, 1965. Author Grant McConnell teaches political science at the University of Chicago. A Sierra Club member, he has spent a great deal of time in the North Cascades.*

IF YOUR VACATION WANDERINGS of the last few summers have taken you into the Mount Baker National Forest of Washington State, you have probably encountered a new sort of billboard. Its wording varies, sometimes even its topic, but its purpose is constant: to maintain a bureaucratic empire serving the logging industry of a handful of small communities now surrounded by cut-over land. The billboards themselves, expensively carved in large slabs of Western red cedar, are the work of the United States Forest Service. They are commonly located at turn-out points of scenic beauty. Being the product of a public agency, they presumably are beyond the reach of any anti-billboard law. Nevertheless, billboards is what they are. More, they are weapons in a massive public relations campaign and their central message is political propaganda.

Some of these billboards give odd bits of information about the region—the presence of mountain goats, for example, or the colorful and abortive mining history of the area. These, however, are the attention attractors for the pay-off, which seeks to mobilize support for a Forest Service policy that is increasingly anachronistic and controversial. One sign, for example, is placed at a spot that offers a view of splendid glacier-hung peaks and magnificent forest. In the midst of the nearby view, however, there is a patch which has been logged in the usual manner, by clear cutting. The sign proclaims that the watershed is being managed for "multiple use"—recreation, wildlife, forage, water and timber. The only significant part of the statement is that about timber, which means it is

being cut. Another sign, facing such a patch cut, states that the logging has been carefully regulated to avoid erosion. The particular cut indeed seems to bear out the claim; however, if one glances back at another cut-over patch from a point 100 yards beyond, erosion is both obvious and serious. Another sign proclaims that an area was cut ten years before and then replanted. It is so placed that the tourist naturally looks to a hillside of virgin forest rather than to the nearby scrub.

Such billboards are to be found in many parts of the National Forest areas of the West, almost invariably in spots of great natural beauty. In most parts of the National Forests, logging is clearly the principle service which the forests can offer and about these there is no dispute; with respect to the scenic areas of high quality, however, there is controversy and in them the signs are sprouting. The billboards are probably nowhere denser than in the Mount Baker Forest. The background here is that, belatedly, a substantial number of local citizens and individuals from widely scattered parts of the nation have discovered the North Cascades (much of it is in part of Mount Baker Forest) and then learned the plans of the Forest Service with respect to it.

The North Cascades until very recently has been—and to a large degree still is—an area of nearly pristine wilderness. It is also an area holding the greatest concentration of natural beauty in the entire United States. A labyrinth of deep valleys incised among high and jagged peaks, it has more and larger glaciers than all of the Rocky Mountains of the United States. Here, mountain relief is often more than 6,000 feet. Glacier Peak, one of the most exquisite of volcanoes, rises to 10,500 feet above sea level, while the bottom of Lake Chelan is 400 feet below sea level and lies in a canyon more than 9,000 feet deep at points, the deepest chasm in North America. In the narrow valleys are delicate meadows superior to any found in the Alps, and cathedral-like groves of great trees. By almost any standard, the area is preeminent among the scenic splendors of America. A 1937 study proposing a national park in the area stated that such a park would "outrank in its scenic, recreational and wild-life values any existing national park and any other possibility for such a park within the United States."

Given such a land and such an evaluation, it would seem obvious that public policy should be directed to providing for the area the most complete and careful protection of which the nation is capable. Nevertheless, logging and other practices of the most destructive sort are planned and, in fact, are already being rushed into operation. The response of forest authorities to the protests of public-minded citizens is to accelerate the timber sales and to mount a massive public relations campaign of ranger speeches to civic clubs, inspired stories in newspapers, Potemkin village tours for local leaders, and the billboards.

During the next few months, and perhaps years, the North Cascades will be the battleground of the greatest and most important struggle for conservation in recent time. There have been other struggles and some notable accomplishments in the last few years—Cape Cod, Canyonlands, Point Reyes and others. None of these, or even all collectively, have had the importance of the North Cascades, whose more than 2 million acres are of a quality justifying the highest superlatives. Yet a dispute rages as to whether any of it should be preserved for future generations. Over the years, numerous proposals have been made for saving the North Cascades, but each has succumbed before sharp and often highly disingenuous attacks. This time, however, conservation organizations are aroused and the mood of the public is different. The Kennedy administration made a strong new beginning in the conservation of the nation's scenic areas. Yet, it was unwilling to tackle the North Cascades, and in 1963 put the issue on ice by appointing an inter-agency study commission (including the Forest Service). The commission will soon report, and the issue will be before the public and ultimately before Congress. [Since this article was written, the North Cascades Study Team issued its report; see February *SCB*.] The battle will be bitter.

Why should there be any issue or dispute on the matter at all? The answer is not simple and goes to the heart of the conservation problem across the nation. It would be easy to say that there is deep rivalry and jealousy between two bureaucracies, the Forest Service and Park Service, one an agency of the Department of Agriculture, the other of the Department of the Interior. To say this, however, is only to touch the surface. The Forest Service, which has had jurisdiction over the area since its own creation, has had a reputation as one of the ablest and most enlightened agencies of the government. It was the chief administrative accomplishment of the progressive movement and did more than any other body to slow the exploitation of public lands that so disgraces American history. Under the aggressive and political leadership of Gifford Pinchot, it achieved substantial independence inside the Department of Agriculture, and freedom from influence either by the Presidency, changing administrations or "politics" (i.e., parties). Always directed with great skill, it managed to preserve this independence and perhaps achieved its height of political power by directing and managing the fight which defeated FDR's reorganization plan in 1937.

As with other reforming and formally independent agencies, time and exposure took their toll. In order to survive and also maintain its bureaucratic autonomy, the Forest Service had to accommodate itself to the interest groups whose activities it was supposed to regulate. Over time, the service, like such other independent regulatory agencies as the ICC, the CAB and the SEC, acquired as its own constituency a particular industry, in this case lumber. Thus, in symbiotic relationship, there lies behind the Forest Service a strongly organized and determined lumbering industry.

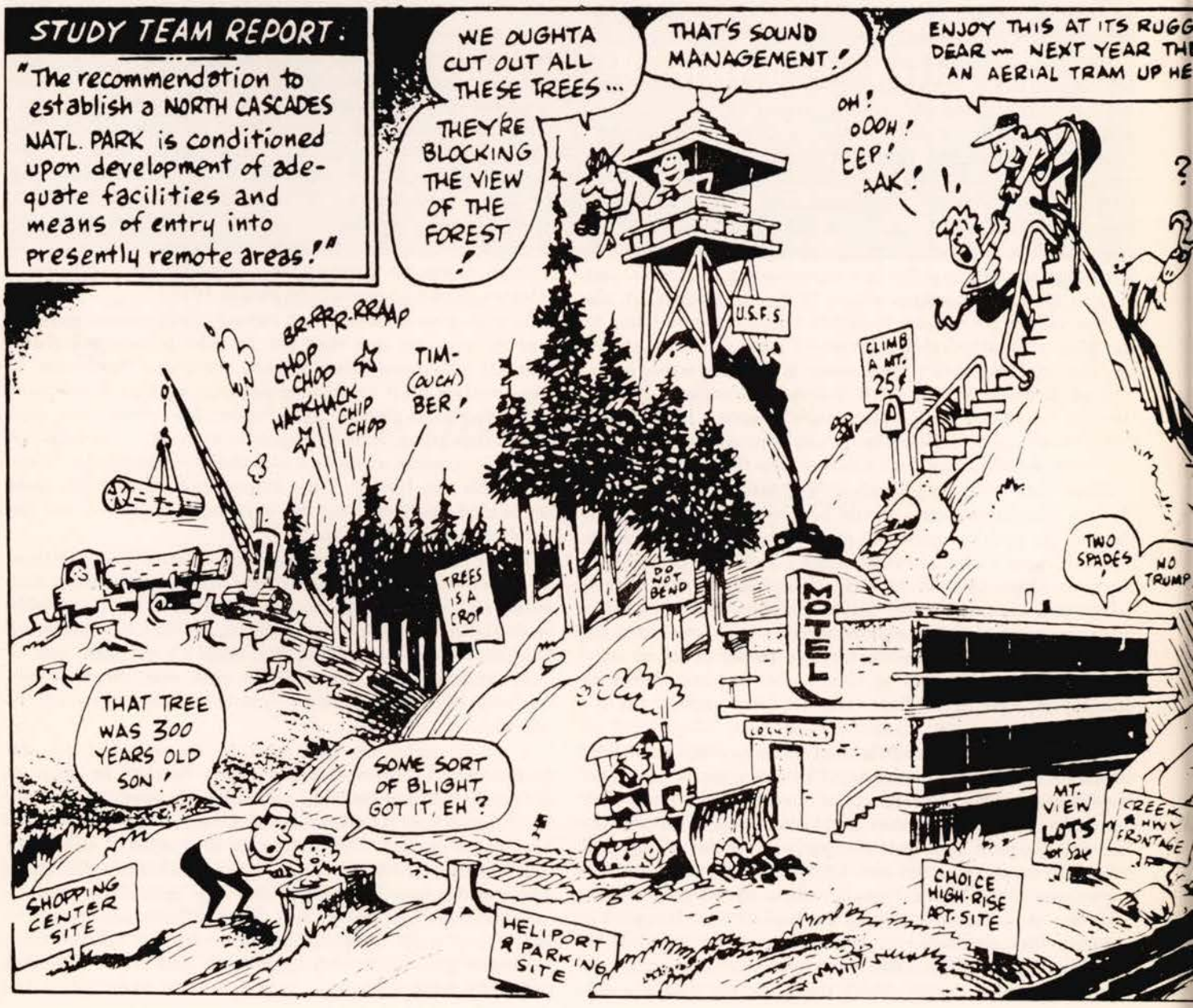
The building of this relationship has been strongly fostered by several other forces. One of these is the way in which Forest Service personnel are selected and trained. As a highly professionalized service, the agency draws its career personnel from the schools of forestry. But these schools send most of their graduates into industry and until very recently their curricula have been strongly oriented to the wants of the industry.

A second factor has emerged from the independence and "nonpolitical" character of the Forest Service. In order to maintain itself and build its own political system, the service has decentralized its operations in a manner for which it has been much praised. This has meant that regional and forest supervisors, even district rangers, have had large discretion. These officers have accordingly been able (and encouraged) to maintain close personal contact with the local communities in which they work. This contact, however, has led inevitably to closest association with individuals who are socially and politically most influential. In the forested areas where the

agency operates, such individuals are naturally the mill owners and operators. Understandably, despite occasional family quarrels, an identity of outlook has grown up among industry, local leaders and service officials. The result is not corruption as it is commonly understood, but the public implications are nonetheless serious.

These implications did not become evident until rather recently. The forests were large and it appeared that they could offer something for everybody. The service coined the phrase "multiple use" to symbolize its past easy successes in keeping everyone happy. With a growing population, affluence and accelerated travel, however, the easy solution to conflicting demands is no longer available. "Multiple use" has been a pleasing slogan, but as a policy it is largely meaningless. It suggests that a given piece of land can be made to serve an array of different purposes. Sometimes this is possible; some purposes such as protection of water and scenery, for example, are compatible. Under such conditions there is no problem and no policy is needed. With other combinations such as scenery and logging, however, the conflict is serious and policy is needed if decisions are to be anything more than the expressions of the personal tastes and prejudices of the bureaucrats making them. As things stand, with "multiple use" as the only guideline, decisions on land use are resting on nothing more substantial or defensible.

So far the Forest Service has adamantly refused to face its problem. Its response to questioning and criticism has been the P.R. campaign and the iteration of the slogan of "multiple use" (latest variant: "Land of Many Uses"). It relies even more heavily on its longstanding political allies in the lumbering industry and the local elites. It also attempts to gain popularity among the throngs of visitors now coming to the forests for their holidays. This takes the form of road building (paid for by logging in the areas "opened up"), roadlike trails comfortably available to motorcycles, and similar facilities for mass use. This latest and somewhat desperate phase of the



struggle for political support only accelerates the destruction of the essential values of the areas in the forests which have drawn the new visitors in the first place. This, however, is beside the point of the effort, which is preservation not of the nation's scenic heritage but of the political system of which the Forest Service is the culminating part.

The stakes in this contest are large. They involve the survival or destruction of some of America's finest scenic areas. Ironically, however, they do not involve vast amounts of potential lumber, for the timbered valleys of high scenic quality are generally very narrow. The North Cascades fight is by all odds the biggest item in this struggle, but there are numerous other splendid areas within the vast empire of Forest Service lands which are under imminent threat of spoliation at agency fiat. In some areas, groups of outraged citizens have banded together to forestall the destruction until the public can be alerted to its stake. Often, however, it turns out that roads have already been pushed to the heads of timbered valleys at the very heart of scenic areas and logging started from the top downward. In such areas, the too-often-justified expectation of the Forest Service is that, with the finest parts of the scenery destroyed, there no longer will be any point in a public fight for preservation, and the lower valley points can then be logged at the industry's convenience. A few picnic tables along polluted streams then can give whatever substance was ever offered by "multiple use."

It is one of the tragedies of political life that a one-time crusading agency of government should become a major threat to the public interest it was created to defend. Yet this has happened before and we have not yet learned how to deal with the disease which brings it about. It is an even greater tragedy that just as prosperity and increasing population pressure are sending hundreds of thousands of Americans out in search of some more permanent values than dollars or board feet, the greatest resources in which those values are to be found are marked for quick destruction. ■

Alan Pratt, Cartoonist; reprinted from The Seattle Times

Redwood Creek, whose watershed contains the finest remaining groves of virgin redwoods. Photo by D. F. Anthrop.

The Redwood National Park

A Point of Crisis

by Edgar Wayburn

Vice President of the Sierra Club and a member of its Board of Directors and Executive Committee, Dr. Wayburn is in charge of the club's campaign for a redwood national park in the Redwood Creek-Prairie Creek area of Humboldt County.

AT LONG LAST, the issue of a redwood national park is squarely before the American people. A "cliff hanger" for nearly two years, the park fight has reached full crisis with the introduction in Congress of the Administration bill for a redwood national park. And "crisis," unfortunately, is the proper word. For, after long and costly indecision and delay, the Department of the Interior has failed to endorse its first choice of two years ago for a redwood park in the Prairie Creek-Redwood Creek watershed (embodied in Jeffery Cohelan's bill before Congress since last October) and has come out instead for a park at Mill Creek. Such a park, at Mill Creek alone, would be a sorry substitute and a chance lost for all time.

In proposing the creation of a redwood national park in northern California, President Johnson was eloquent: "It is possible," he said, "to reclaim a river like the Potomac from the carelessness of man. But we cannot restore — once it is lost — the majesty of a forest whose trees soared upward 2,000 years ago." He went on to affirm "the desirability of establishing a park of international significance." And then he added: "This will be costly. But it is my recommendation that we move swiftly to save an area of immense significance before it is too late."

The words might have been our own. Certainly they are highly pertinent to the Cohelan redwood park bill and the similar proposal advanced in the Senate by Senator Lee Metcalf. In the face of them, it seems incredible that Secretary of the Interior Stewart L. Udall has pro-

posed a park that falls so short of having major significance. In choosing Mill Creek as the site of the Administration's proposed park, he has ignored the advice of his conservationist supporters — and the recommendations of his own experts in the Department of the Interior. He has made this major decision without having visited the redwood region, despite repeated urging and invitations.

Consider Mr. Udall's choice: the proposed Administration park would take in the watershed of Mill Creek in Del Norte County. Outside of Jedediah Smith Redwoods State Park, this watershed is about 75 percent cut over, and is now being logged steadily on a year-round basis. The Administration plan calls for a park totalling 43,800 acres, of which about 14,400 acres (or one-third) is now in two of California's finest redwood state parks, Jedediah Smith and Del Norte Coast. The federal park would in effect link these parks, and would add to them about 7,815 acres of virgin redwood forest. Almost a thousand acres of this were scheduled for acquisition by the state at the time of the Administration's announcement. The remaining 6,800 acres would be added essentially for watershed protection. The price tag for this is approximately $56,000,000 for land acquisition — and an additional $20,000,000 later for development. As President Johnson noted, this is costly. It is unfortunate that a considerable slice of this money would have to go for acquisition of dozens of summer homes owned by individual citizens who might otherwise be supporters of a national park. In the Redwood Creek proposal, practically all the real estate to be acquired would come from the lumber companies.

In view of its size and location, the Mill Creek park offers limited recreational opportunities and no possibility of meeting future needs except by encroaching on its core forests. As a state park it is a superb fragment, but why change the signs at the entrance gate? This could well destroy the area, which is far too small to take the impact of projected national park visitation — the kind of visitation that Del Norte County must have to survive the impact of losing Rellim, its largest lumber company, which a park there would put out of business. For Del Norte, still "coming out from under" the devastation of a tidal wave two years ago, is already 72 percent publicly owned, with an economy that is fragile at best. Highly elaborate and expensive plans have been developed by the Administration to try to ease the economic shock of creating a park in such a situation.

Contrast this with the Redwood Creek-Prairie Creek area some 30 miles to the south in Humboldt County, a county over twice as large with a far broader economic base. The Redwood Creek area was recommended in 1964 by Mr. Udall's National Park Service study team in the preliminary report, *The Redwoods,* as its first and only choice for a significant redwood national park. The conservation opportunity seems three times as great. As proposed by Congressman Cohelan and Senator Metcalf, a park here would embrace 90,000 acres. (Even this is small by national park standards.) It would include some 9,500 acres of virgin growth presently in Prairie Creek State Park and would add another 33,000 acres of the finest remaining virgin forests left anywhere: forests up Lost Man Creek, Little Lost Man Creek, and up Redwood Creek itself — forests that contain the tallest known trees and unexplored areas where still taller trees may be found. This park would have 18 miles of spectacular coastland, the last home of the Roosevelt Elk that once roamed the entire redwood region. It would also extend far enough inland to reach beyond the fog into sunshine.

Redwood Creek itself offers tremendous recreational possibilities, including river-running when the water is high, and many miles of riding and hiking trails. Up Redwood Creek is the only mountain ridge left in the redwood region that still wears its virgin redwood cover. And four miles of riverfront are still bordered on both sides by virgin redwood groves. In fact, Redwood Creek alone embodies a full sample of all the features found in redwood terrain—from shore to mountain top.

The cost of a park here would be high, too. Preliminary estimates set $140,000,000 as the price of the Cohelan-Metcalf proposal, and it is argued that such a sum is not available. But why not start the real park here with funds that *are* available? We could then add to it other lands purchased with donations from foundations and private citizens, and lands obtained from authorized exchanges. Seventy-five cents from each citizen would buy this *real* redwood national park!

Nearly 50 years ago in 1920, Madison Grant, one of the three founders of the Save-the-Redwoods League, wrote in the *National Geographic:* "A national park requires a large area, with sufficient isolation and compactness to admit of proper administration. There are three such areas available: first, the groves along Redwood Creek . . . peculiarly adapted for a national park; second, the groves along the Klamath River, as yet untouched and of great beauty; third, the Smith River groves, in Del Norte County." Today, of course, not one of these groves remains intact; the Klamath groves are gone, and except for Jedediah Smith Park, those along the Smith River are gone too. It is in the drainage of Redwood Creek alone that significant groves remain to make a worthwhile national park.

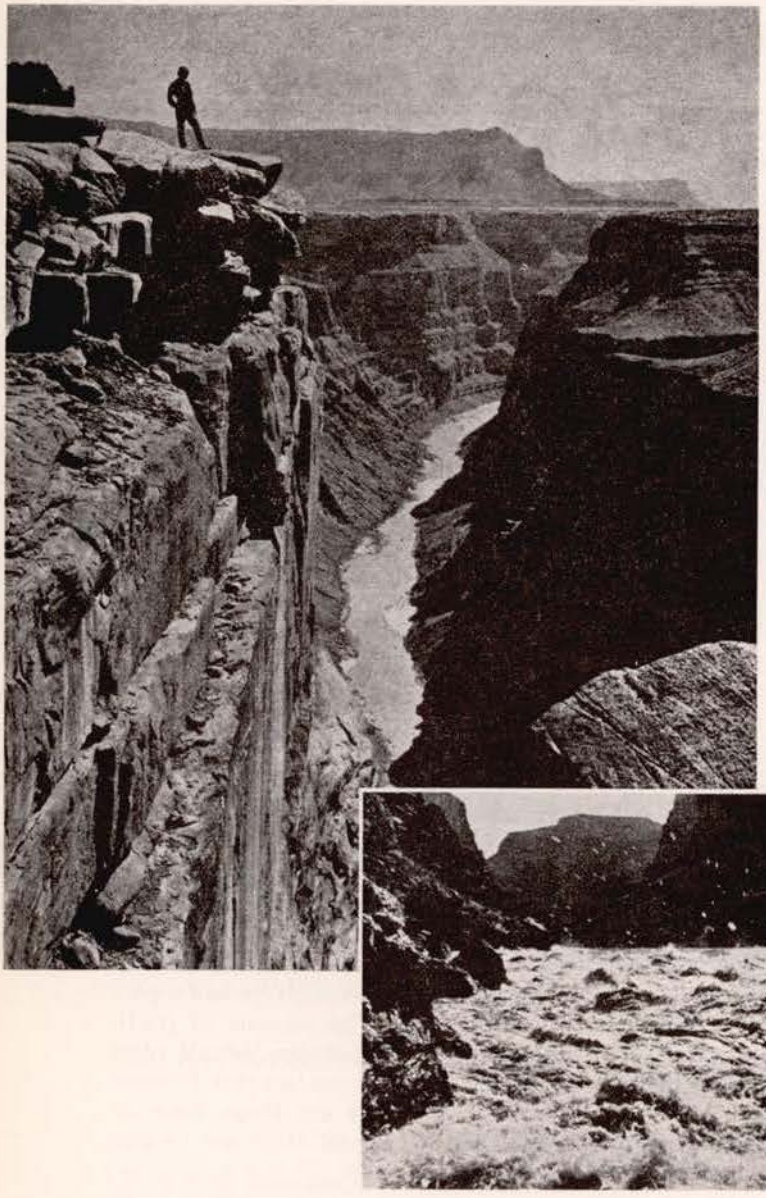
The decision to turn from this area can benefit only the three lumber companies who own these remaining redwoods. These three companies—Simpson, Georgia Pacific, and Arcata—are powerful and wealthy. How can we weigh their interests against the interests of the American people today and tomorrow? In whose interest should the decision be made?

The answer lies with the American people today. There are two different redwood national park proposals before Congress: the Cohelan-Metcalf proposal for a Redwood Creek-Prairie Creek park, and Mr. Udall's proposal for half-a-park at Mill Creek. The measure of public support for the Cohelan-Metcalf plans may be gauged by the fact that 50 members of the Senate and House have cosponsored it; a total of 12 are backing

(Continued on page 19)

Rocky Mountain Chapter, less than a year old, raised $1,100 for a full page ad in the *Denver Post* (circulation: 347,000) in less than three weeks. The chapter's next target: an ad in *The New York Times*. Contributions (from within or without the chapter) may be sent to the Sierra Club, Grand Canyon Fund, 1440 E. Bates Avenue, Englewood, Colorado 80110.

"Leave it as it is



. . . You cannot improve on it. The ages have been at work on it and man can only mar it." Theodore Roosevelt

The Grand Canyon of the Colorado is a living, working marvel of world reknown. The living river is a roaring, silting, flooding torrent which, through two billion years, has carved the canyons you see today. Its annual floods, laden with soil washed from its walls and ground from its rock, polish and carve, drop sandbars and flush out sidestream canyons to make the beauty—the excitment—you know.

To mutilate Grand Canyon and undermine the principle of park preservation would be bad enough at best. To do so when the sacrifice is neither necessary nor desirable would be an inexcusable act of wanton vandalism.

Two dams are proposed for Grand Canyon; they will choke the river and kill the canyon forever. One dam will back water into Grand Canyon National Monument; the other will cut the flow of the Colorado River through Grand Canyon National Park.

What are they for? As hydroelectric power dams, they are included in the overall Southwest Water Plan, which is designed to alleviate the water deficit of the Southwest. Part of this project calls for immediate diversion of Colorado River water to the population centers of Arizona.

However, these ¾ billion dollar hydroelectric dams, at Bridge and Marble Canyons, have no necessary connection with the Southwest Water Plan. They will not be used to divert water; they will not conserve water; nor will they supply water to cities and dry lands. They will lose, by evaporation, enough water to supply a major city. Their sole purpose is funding of water relief for Arizona. They are hydroelectric dams only. A small part of their power is designed to pump water onto the Arizona plateau, the balance is to be sold as commercial power. The high cost of the dams far exceeds the ½ billion dollar cost of the project they are to finance.

Due to progressive technological improvements, cost of generating private power will continue to drop rapidly; however, the cost of these dams will remain fixed at their present rate for their 50-year life expectancy.
Other, economically sound, ways of financing Arizona water have not been adequately explored. If Grand Canyon National Park and Monument are to remain inviolate, power sources other than these dams are available and must be used.

CONGRESS WILL RESPOND TO AN AROUSED PUBLIC:

SAVE GRAND CANYON

Write President Johnson . . . . . .

Write Your Congressman . . . . . .

Write your newspaper, your magazines, your radio and TV stations . . . TELL THEM IT'S YOUR GRAND CANYON AND YOU WANT IT LEFT AS IT IS.

. . . TO EXPLORE, ENJOY, AND PROTECT THE NATION'S SCENIC RESOURCES . . .

Sierra Club, Rocky Mountain Chapter
1440 East Bates Englewood, Colorado 80110

. . . . . Please send information about the Grand Canyon crisis and how I can help.

. . . . . Please accept the enclosed contribution $(. . . . .) to help your program to save a living Grand Canyon.

. . . . . I would like to know more about supporting the work of the Sierra Club.

. . . . . (Please be legible)

. . . . . Zip . . . . .
(Dues and contributions are deductible)

"NOT BLIND OPPOSITION TO PROGRESS BUT OPPOSITION TO BLIND PROGRESS"

Coloradans Rally to the defense of the Grand Canyon

IF THE PROPOSAL to build Marble Gorge and Bridge Canyon dams on the mainstem of the Colorado River in Grand Canyon is defeated, Colorado conservationists will deserve much of the credit. The Rocky Mountain Chapter of the Sierra Club, which created and financed the advertisement reproduced at the left, has been at least as active in the Canyon's defense as any other chapter. And an extremely active leadership role has been played by the Colorado Open Space Coordinating Council's Grand Canyon Workshop, under the chairmanship of Joan Inman. Among the Workshop's recent activities have been the following:

A series of luncheons for officials and opinion-makers, at which the club's *Glen Canyon* film was shown. Guests included Congressmen Wayne Aspinall and Byron Rogers, former governor Ed Johnson, Felix Sparks of the Colorado Water Conservation Board, newspaper editors, and TV program managers.

A TV debate between Daniel Luten, Assistant Treasurer of the Sierra Club, and Commissioner of Reclamation Floyd Dominy. A TV Committee headed by Ruth Weiner has arranged several other shows, and more are scheduled.

Film Chairman Dick Snyder has shown *Glen Canyon* to schools and private groups. On March 22, there was a showing in a public auditorium seating 1,000.

A letters-to-the-editor campaign has been highly productive. One well written letter appeared in the *Baltimore Sun, Los Angeles Times, St. Louis Post-Dispatch, Seattle Times, Minneapolis Tribune,* and four Colorado newspapers. A letters-to-congressmen campaign is also being pushed.

Workshop workers have contacted dignitaries who were passing through (for example, Secretary of the Interior Stewart L. Udall, publisher Robert Luce of *The New Republic*).

And the COSCC Workshop is joining the Colorado Mountain Club, the Sierra Club's Rocky Mountain Chapter, and other interested organizations to raise money for a full-page ad in *The New York Times.*

This, surely, is a record that any conservation group might be proud of.

Yukon Flats, which would be drowned by Rampart dam, is breeding area and prime habitat for waterfowl and other wildlife. Philip Hyde photo.

Would Rampart dam be

Alaska's Economic Rampart?

by Stephen H. Spurr

The following paper was prepared for presentation at the 31st North American Wildlife and Natural Resources Conference, Pittsburgh, March 16. It is based upon the summary report Rampart Dam and the Economic Development of Alaska, *published by the University of Michigan School of Natural Resources under the sponsorship of the Natural Resources Council of America. Stephen H. Spurr, Professor of Natural Resources at the University of Michigan, directed the Rampart Dam-Alaska Economic Development Project. Other members of the faculty study group include Ernest F. Brater and Justin W. Leonard of the University of Michigan, Michael F. Brewer of George Washington University, A. Starker Leopold of the University of California, and William A. Spurr of Stanford University. The summary report (62 pages, published March 1966) is available from the Horace H. Rackham School of Graduate Studies, University of Michigan, Ann Arbor 48104.*

THE PROPOSED RAMPART CANYON DAM on the Yukon River, 100 miles northwest of Fairbanks, would create a body of water bigger than Lake Erie. This largest of all man-made reservoirs would take 30 years to fill, but once filled, would produce 34 billion kilowatts of annual electric energy. With a capacity two and one-half times greater than that of Grand Coulee, Rampart could provide electricity for six million people. Yet Alaska has only 253,000 inhabitants, and the dam site is 2,000 miles through another and mountainous country to the nearest part of the mid-continental or "lower 48" United States.

Should it be built? Optimists and public-power enthusiasts can readily present exponential growth forecasts predicting that 50–100 years from now Alaska should have millions of inhabitants each using quantities of electricity to keep themselves warm. The sophisticated and professional estimates of the U.S. Bureau of the Census and the National Power Survey do not confirm this, but then, who could have predicted the world of the twentieth century a hundred years ago in 1866?

The Michigan study group attacked the problem of the economic development of Alaska not from the standpoint

of trying to justify or deny the feasibility of the Rampart project, but by trying to build up an objective and constructive power demand from the present economic situation in this largest and most undeveloped of our states.

First, the most important problem to solve is that of providing low-cost electric energy to most Alaskans in the near future. More than 60 percent of the people in Alaska live in the Railbelt Area extending from the Kenai Peninsula through Anchorage and the Matanuska Valley to Fairbanks. Most of the growth of the state should occur in this area. Cook Inlet not only bounds the biggest and fastest growing city in the state, but also encompasses major petroleum and natural gas discoveries.

Twenty years hence, in 1985, estimates derived from U.S. Bureau of the Census, National Power Survey, and U.S. Department of the Interior projections are that Railbelt Area will have nearly 300,000 inhabitants, each using 10,000 kilowatt hours of electric energy annually. This will require a total installed electric generating capacity of 650,000 kilowatts. Rampart, with its projected installed capacity of 5,050,000, would be eight times too big and could not be in full production until about the year 2000.

The immediate electric power needs of the Railbelt could be quickly and relatively inexpensively met through the construction of an extra-high-voltage transmission grid serving the entire area, thus permitting the construction of large and efficient central generating units. Natural gas is in plentiful supply. Electric energy from gas-fired generating plants should be almost immediately available in the Anchorage area at a lower cost than hydroelectric power could be provided from almost any source ten to thirty years in the future.

Second, efforts of Alaskans to attract power-intensive electroprocess industries to the state should be encouraged. Only aluminum uses enough power in a single block to justify a large power development by itself. The best opportunity for attracting the essential aluminum plant, as well as other industries which might follow, would be provided by that project which would deliver up to one million kilowatts of electric energy at the lowest possible rates to a deep-water harbor open 12 months a year.

The project that best satisfies these requirements is the Yukon-Taiya diversion of the Upper Yukon. A dam at Miles Canyon on the Yukon River above Whitehorse would permit the diversion of the Upper Yukon from Lindeman Lake in Canada under Chilkoot Pass to the Taiya River near Skagway, Alaska. Upwards of 1,200,000 kilowatts of very low-cost power can be generated at tidewater. A combined Canadian-American feasibility study of this project would appear warranted and is strongly recommended.

The Railbelt power grid and the Yukon-Taiya project should provide Alaska both with low-cost power for its major population centers and extra-low-cost power to attract electroprocess industries. Several attractive giant hydroelectric sites are available. These, however, should not be developed until the market for hydroelectric power is far more evident than it is today in the face of lower alternative costs of natural gas and nuclear energy.

Among these projects to be considered at some time in the future, Rampart would produce the most power and consequently would have the most uncertain markets. It would be an all-or-nothing gamble. Only if all its power is used would the project prove economical. Its effect upon the salmon run of the Yukon and upon the North American waterfowl breeding population would be great. Rampart should not be authorized at this time.

Wood Canyon on the Copper River could well prove to be more desirable than Rampart in terms of actual power costs. It would block a major salmon run but would create a reservoir of high recreational and fisheries value in marked contrast to Rampart reservoir.

The Devil Canyon or Upper Susitna project is undoubtedly higher than Rampart in unit energy costs, but it would produce a more reasonable amount of power in a short period of time at the right place.

Woodchopper, upstream from Rampart on the Yukon, would appear to be less desirable economically at the present time, but would have much less serious effects than Rampart on salmon and waterfowl. Its power output and location are more suitable for early development.

None of these projects, hawever, appear to be competitive with natural gas in the Railbelt Area, assuming that the oil companies will sell it at competitive rates; or with the Yukon-Taiya project in southeast Alaska, assuming that the necessary international coöperation can be achieved. Omens for the proving out of both assumptions are favorable.

The escape clause in all arguments for a Rampart Canyon dam or any other large hydroelectric project is that any power not needed locally can be exported profitably to the general North American market.

This market does exist and will continue to increase. The question is simply one of whether the particular project is the cheapest and best source of that particular increment of power.

In these regards, the prospects for Rampart are not particularly good. Transmission 2,000 miles across Canada involves engineering and location problems yet to be solved, international agreements yet to be negotiated, and transmission costs in any event that should make Rampart power more expensive on the lower Pacific coast than nuclear power generated there.

Hydroelectric costs seem bound to rise over the next 30 years. Major reductions in nuclear power costs have occurred in the last two years. The National Power Survey (1964) projects

average nuclear generation costs dropping from a current 5 to 6 mills per kilowatt hour to 3 to 4 mills by 1980. It would follow that projects such as Yukon-Taiya, which could tap the main U.S. market within the next 20 years would be much more likely to be competitive than Rampart, whose power would become available only after the turn of the century.

In summary, with the distribution of low-cost gas-fueled electric power throughout the Railbelt Area and the development of minimum-cost power in southeastern Alaska through the Yukon-Taiya project, most Alaskans would have early access to cheap electricity and a start can be made to attract electroprocess industries to the state. From these beginnings, the Alaskan power net can be spread, and large low-cost hydroelectric projects can be added, as the Alaskan economy requires. ■

(Redwoods, cont'd. from page 15)

Mr. Udall's. But this is not enough—there must be hearings in this session of Congress on a redwood park if we are to have any park at all. Interior Committee Chairman Wayne Aspinall in the House, and Interior Committee Chairman Henry M. Jackson in the Senate, must be convinced of the terrible urgency of this matter. The saws are not idle while the talk goes on. The trees that soared heavenward centuries ago are toppling like ninepins. With no moratorium on cutting in the finest groves, our chances for a national park continue to go up in the blue smoke of the busy burners.

To quote President Johnson once again: "Let us from this moment begin our work in earnest — so that future generations of Americans will look back and say: '1966 was the year of the new conservation, when farsighted men took farsighted steps to preserve the beauty that is the heritage of our Republic.' "

Amen.

Summer Program for Student Conservationists

The Student Conservation Association has positions for 80 qualified high school, college, and graduate students who wish to work and learn in the Student Conservation Program that it operates in coöperation with the National Park Service. Positions will be available during the summer at Acadia, Grand Teton, Great Smoky Mountains, Olympic, and Zion National Parks, at Cedar Breaks National Monument, and at Sagamore Hill National Historic Site. For information, write to the Association at Sagamore Hill National Historic Site, Mtd. Rt., Box 304, Oyster Bay, New York 11771.

Board Actions

A REGULAR QUARTERLY MEETING of the Board of Directors of the Sierra Club was held March 5 in the recently enlarged and refurbished William E. Colby Memorial Library at club headquarters. Resolutions adopted follow:

Chapter publications and minutes

"The Board of Directors requests the staff and officers to work out with the Council and the Chapters ways and means for sending all Chapter publications and all minutes of Chapter Executive Committees to the Board of Directors and the staff."

Olympic National Park

"The Sierra Club joins the Olympic Park Associates in opposing any reduction in the size of Olympic National Park in the area north of Lake Quinault or along the Bogachiel River. It believes these areas, which are now in the park, are essential to its integrity."

California Forest Practice Act

"The Sierra Club shall take appropriate legal action in the discretion of the Executive Committee to effect needed changes in the substantive rules of logging and cutting practice formulated under the California Forest Practice Act and changes in the procedures by which such rules are formulated. Such action is to be taken in the club's name, after recommendation of the Legal Committee, by attorneys to be selected and directed by the Executive Committee."

Moss Landing oil refinery

"The Sierra Club opposes the construction of an oil refinery at Moss Landing, Monterey County, California, as proposed by the Humble Oil and Refining Company, because an oil refinery at this location would impose a grave threat to the unique biological, recreational, and esthetic values of the surrounding land and sea area."

Key Deer Refuge

"The Sierra Club endorses the objectives of legislation to enlarge the Key Deer Refuge in Florida (H.R. 12324)."

Predator control

"The Sierra Club endorses the objectives of legislation to restrict predator control programs, and recommends that the wolverine be added to the list of affected predators (H.R. 4159)."

Endangered species

"The Sierra Club endorses the objectives of legislation to establish a program to protect species threatened with extinction (S. 2217)."

Reichle dam

"The Sierra Club opposes construction of the Reichle dam, which the Bureau of Reclamation has proposed to build on Montana's Big Hole River as part of the Three Forks Division of the Missouri River Basin Project."

Appalachian Trail

"The Sierra Club endorses the objectives of legislation to improve administration of the Appalachian Trail (S. 622)."

Population control

"The Sierra Club endorses the objectives of legislation to establish federal machinery to deal with the problems of rapid population growth (S. 1776)."

Uninhabited islands

"The Sierra Club endorses the resolution of the American Society of Mammalogists (dated June 23, 1965) which calls for advance consultations with officials directly responsible for protecting the flora and fauna of uninhabited islands before government programs, military or otherwise, are undertaken that affect such islands. When visits are to be made, the visitors should be instructed on the preservation of unique biota."

Desolation Valley reclassification

"The Sierra Club endorses the recommendation of the Mother Lode Chapter for the reclassification of the Desolation Valley Primitive Area in the El Dorado National Forest, California, as a wilderness area under the Wilderness Act, and which would increase its size from 41,000 acres to 65,000 acres. . . ."

Apostle Islands National Lakeshore

"The Sierra Club endorses legislation to establish an Apostle Islands National Lakeshore in Wisconsin (S. 2498)."

Santa Monica Mountains

"The Sierra Club believes that it is important to acquire for park purposes lands connecting existing planned park developments in the Santa Monica Mountains. Such acquisition is essential for long-range plans which could unify park projects to achieve maximum public benefit from minimum public investment. It believes it is especially important to provide a connection between the California State Park project Silvia Park area and the proposed County Sanitation District reclamation development in Upper Rustic Canyon. It urges that Los Angeles City and County agencies take substantial leadership in accomplishing this acquisition."

San Miguel Island

"The Sierra Club urges that no bombing and missile firing in the vicinity of San Miguel Island be conducted within the one-mile limit so that marine life suitable for preservation in the underwater national park may remain undisturbed."

Sargent Cypress

"The Sierra Club recommends that the California Senate Natural Resources Committee be encouraged to schedule a hearing in San Luis Obispo County on the protection of the Sargent Cypress groves, brush control, prescribed burning, and related matters."

Lopez Canyon

"The Sierra Club recommends that the Forest Service take action to administratively protect the wilderness quality of Lopez Canyon until it may be protected by a formal designation."

Publications program

"The Board of Directors highly commends David Brower on the success of the publications program and notes with pleasure the growing number of excellent books published under his guidance, the numerous awards which they have received, and their significant aid in advancing the Sierra Club's conservation program." ■

Washington Office Report

Allagash Wilderness Waterway

On February 5, Governor John Reed of Maine signed two bills that should make possible the preservation of the Allagash as a free-flowing river. The first bill amended the Revised Statutes of the state by adding a new paragraph:

"Whereas the preservation, protection and development of the natural scenic beauty and the unique character of our waterways, wildlife habitats and wilderness recreational resources for this generation and all succeeding generations; the preservation of erosion, droughts, freshets and the filling up of waters; and the promotion of peace, health, morals and general welfare of the public is the concern of the people of this State, the Legislature declares it to be in the public interest, for the public benefit and for the good order of the people of this State to establish an area known as the Allagash Wilderness Waterway."

The waterway is defined to include the bodies of water, consisting of lakes, rivers and streams, extending from Telos Lake Dam northerly to the confluence of West Twin Brook and the Allagash, a distance of about 85 miles. The Maine State Park and Recreation Commission will administer the waterway. The commission is charged with approving a "management plan," defined as a plan of timber harvesting operations within the waterway. The commission is also required to establish restricted zones to preserve, protect, and develop the maximum wilderness character of the watercourse. No timber harvesting will be permitted in the restricted areas except for the purpose of "maintaining healthy forest conditions" or "correcting situations arising from natural disasters." The statute does permit a number of non-conforming uses that will make the Allagash something less than a wilderness. Powerboats of any kind are permitted on three lakes, subject only to regulations issued by the commission. Canoes equipped with a motor not exceeding 10 horsepower will be permitted on the waterway. Landing of aircraft is prohibited except for emergency use, necessary use by state agencies, and "use within such landing areas and for such purposes as may be designated by the commission." This blanket authority seems to throw away the barn door. Finally, the commission by regulation may permit aircraft landing during such times as the water areas are frozen, and it may also authorize the use of motor-driven snowsleds.

The second bill signed into law authorizes the Park and Recreation Commission to acquire land and easements, water and power rights, and to provide such facilities as shall be necessary to protect, preserve and develop the maximum wilderness character of the Allagash. The total sum authorized is $3,000,000, one-half of which would be the proceeds of a state bond issue to be submitted to the voters at the November 1966 election. The other $1,500,000 would come from federal sources, presumably the Land and Water Conservation Fund. It is generally understood that the Interior Department was not insistent on bringing the Allagash under federal control, particularly as Maine seemed determined to keep out the federal government.

Hudson River

Another issue of great concern to eastern members of the Sierra Club is the fight over the plan by Consolidated Edison to build a pumped storage plant on the Hudson at Storm King Mountain. For a time this struggle looked almost hopeless.

The defenders of a scenic Hudson, guided by an experienced and skillful attorney, did not give up. In the U.S. Circuit Court of Appeals they won a victory, which in effect remanded the case to the Federal Power Commission, which had not, the court said, given proper attention to the certain damage to fish propagation, to alternative possibilities for producing power, and to scenic and historic values. Now the Sierra Club is joining the Citizens Committee on Natural Resources, The Wilderness Society, and the National Audubon Society in submitting a new petition to the FPC for leave to intervene. The commission has just received a new chairman in the person of Lee White, formerly a member of the White House staff. Whether or not he will bring new ideas to the FPC remains to be seen.

Prospects in the Congress

Chairman Wayne Aspinall of the House Interior Committee has given notice that he expects his various subcommittees to suspend not later than July 15 and the full committee to close its business by August 1. If this schedule is maintained, the House may take no action on the three major controversial issues with which conservationists are involved: a redwood national park, a North Cascades national park, and the Southwest Water and Power project (including the objectionable Bridge Canyon and Marble Gorge hydroelectric dams).

First as to redwoods. Some members of the House committee argue that the rich state of California should use its own funds to save whatever redwoods deserve protection, and they are troubled by the need for greatly increased expenditures for land at Point Reyes.

Senator Jackson, Chairman of the Senate Interior Committee, has asked the Administration to send him a bill for a North Cascades national park, which he wants to introduce in the present session so that the public will have a chance to study the Administration's plans. He seems undecided whether or not to hold hearings in Washington at this session, but he seems confident that he will be able to effect passage of a Senate bill in the first session of the next Congress.

Finally, a few words about the Colorado River and Reclamation's plans. In the Interior Department I sense surprise and annoyance that conservationists did not ecstatically embrace the program after the Budget Bureau recommended that construction of Bridge Canyon dam be deferred indefinitely. We are called extremists, and we are warned that we may find the two Interior Committees turned against us and voting for *both* dams as well as the rest of the project. Chairman Aspinall has said flatly that he intends to hold hearings on this program during this session. He has expressed a wish to finish the various "dunes" bills, then pass a new authorization for land acquisition at Point Reyes, then tackle the Colorado River projects.

—WILLIAM ZIMMERMAN, JR.

NEWS OF CONSERVATION AND THE CLUB

6th Biennial Northwest Wilderness Conference to be held in Seattle

"Northwest Wilderness Tomorrow" will be the theme of the 6th Biennial Northwest Wilderness Conference, sponsored by the Federation of Western Outdoor Clubs, which will be held in Seattle on April 23–24. Reservations are being received by Mrs. John A. Dyer (13245 40th Avenue N.E., Seattle 98125), who is general chairman of the conference. Costs for Saturday luncheon, Saturday banquet, and registration total a slim $7.

A new conservation lobby at work in Sacramento

Most conservation organizations are tax-exempt and barred from lobbying in Washington or state capitols. The Planning and Conservation League for Legislative Action (2636 Ocean Avenue, San Francisco 94132) was set up recently to do what tax-exempt organizations cannot do—maintain a full-time conservation lobbyist in Sacramento. Since most conservation issues have legislative ramifications, the League is a valuable ally of conservation organizations whose work is primarily educational.

Annual summer outing of The Mountaineers will visit the Glacier Peak Wilderness Area, July 23 through August 7

Members of mountaineering and outdoor clubs are invited to participate in The Mountaineers annual summer outing, which this year will visit the Glacier Peak Wilderness Area in the North Cascades. The outing will begin with a boat trip up Lake Chelan to Lucerne, and continue by pack train to base camps at Lyman Lake, Image Lake, and Buck Creek Pass. Cooking and routine chores will be performed by paid helpers; outing members will serve food, wash dishes, and assemble trail lunches. The party will be limited to 75. Cost: $170. For information, write to Ellen Hume, 23511 74th West, Edmonds, Washington 98020.

Fluctuations in level of the Columbia have implications for the Colorado

The Corps of Engineers expects that experiments to simulate the effect of generating peaking power at dams on the Columbia will result in fluctuations of as much as 16 feet in river level downstream. If the mighty Columbia would be so affected, asks Dean Karl Onthank, how much fluctuation could be expected in the relatively small and constricted channel of the Colorado if the proposed dams in Grand Canyon were used to generate peaking power? A truly formidable thought.

"A conservation ethic of unbending principle"

Thomas Dustin, President of the Indiana Division of the Izaak Walton League, analyzed the strengths and weaknesses of other conservation organizations in *The Izaak Walton Magazine* (December 1965). Said he: "The Sierra Club does a fantastically superb job in high level public education, and deserves to be what it unquestionably is today—the most dynamic conservation group in the nation. . . . What is the tactic of the Sierra Club? Simple. It lays before the public a highly sophisticated conservation ethic of unbending principle. Not everyone would join the Sierra Club, but those who do join know exactly why they have joined and where they are going." We hope Mr. Dustin hasn't been too generous.

Commercial development on Santa Cruz Island, a proposed park site, receives approval

The Santa Barbara County Board of Supervisors approved a $20 million resort development and planned community on a 6,700-acre site on the east end of Santa Cruz Island. The Department of the Interior had requested the Board of Supervisors to defer action pending the submission to Congress of plans for a National Marine Park embracing all of the Channel Islands, of which Santa Cruz is the largest.

New quarterly of special interest to California conservationists

California Tomorrow, "a nonprofit educational organization dedicated to bringing to the public a greater awareness of the problems we must face to maintain a beautiful and productive California," now publishes a quarterly called *Cry California*. Editor William Bronson's first two issues have been handsome, informative, controversial, and a definite contribution to conservation literature. California Tomorrow (Forum Building, Sacramento 95814) includes subscription in $9 annual membership dues.

A reminder to users of federal recreation areas

At $7, entrance permits good for an entire year at any of 7,000 federal recreation areas are a great bargain. And proceeds go to the Land and Water Conservation Fund, which is divided between state and federal outdoor recreation agencies.

Mayo Clinic physician believes pesticide deaths may exceed deaths caused by automobile accidents

The Council of California Growers *Newsletter* No. 176 attempts to debunk warnings that pesticides are dangerous. But it begs the question, repeatedly resorting to escape clauses such as "if properly used" and "if used as prescribed." Which amounts to saying that an H-bomb is safe if properly handled. But H-bombs are not sold across the counter to the general public. Dr. Malcolm M. Hargraves, senior consultant at the Mayo Clinic, told the California Medical Association in March that he believes deaths caused by pesticide poisoning exceed deaths caused by automobile accidents. One of Dr. Hargraves' examples: a camper who sprayed his tent with a bug bomb every night for three weeks died within a year of acute leukemia.

Commercial enterprises build ad campaigns on conservation themes

Factory Mutual System (an insurance group) has prepared a series of six advertisements to run in management magazines this year. They deal in a general way with water and air pollution, forest fires, littering, etc. The Fisher-Pierce Company, manufacturer of Boston Whaler pleasure boats, is running a hard-hitting, name-calling series in yachting magazines on specific conservation issues such as the Everglades, Storm King, and the Rampart dam project. Then there is Granny Goose Foods, which, in a TV commercial, thoughtfully supplies a litter basket to catch a potato chip bag casually tossed aside in the midst of a desert. All hail Factory Mutual, Fisher-Pierce, and Granny Goose!

"We note with regret. . . ."

Speaking of the Administration's bill for a redwood national park (sort of), *The New York Times* said editorially: "We note with surprise and regret that Senator Kuchel of California has agreed to sponsor this highly unsatisfactory bill, and with even more surprise and regret that Secretary Udall lends his reputation as a conservationist to such an unworthy compromise. . . . Dollars cannot be decisive when the asset is irreplaceable." Incidentally, the *Times* seldom lets more than two or three days go by without publishing an excellent editorial on conservation.

Mt. McKinley renamed as a dubious honor to Winston Churchill

The highest peak in North America, Mt. McKinley as it used to be known, was renamed Mt. Churchill by executive fiat. The Board of Geographic Names, which wasn't consulted, might have pointed out that it would be the seventh Mt. Churchill on the continent. When place names can be changed so arbitrarily, how real is the honor conferred? (We prefer the Israeli tribute to Kennedy: they planted a grove of trees in his honor.) If Kennedy's successor felt name changing was called for, he might have paid Churchill a more meaningful compliment: he might have changed the name of Johnson City, Texas.

JOE MUNROE: Redwood Creek at the confluence of Bridge Creek, in the area that would be included in a redwood national park under the Cohelan Bill.

See redwood story on page 14

The cost of a park here would be high. Preliminary estimates set $140,000,000 as the price of the Cohelan-Metcalf proposal, and it is argued that such a sum is not available. But why not start the real park here with funds that *are* available? We could then add to it other lands purchased with donations from foundations and private citizens, and lands obtained from authorized exchanges. Seventy-five cents from each citizen would buy this *real* redwood national park!

—EDGAR WAYBURN