# Sierra Club Bulletin

APRIL 1969



John Flannery: The timber wolf, "criterion of wild country."

## President's Message

## After The Brawl Is Over

The first full-scale partisan election in Sierra Club history will be over by the time this editorial is read. As it is being written, we do not know what the results will be, or who will have come out ahead in this altogether too bloody battle.

We do know, however—and sadly—that whatever the outcome, this election has already cost us dearly. It has weakened our public image. It has frequently exhibited the heat and dirt of an old-fashioned no-holds-barred political fight. Issues have been befogged. Screams of "unfair" have been heard. There have been innuendos, mud-slinging, unkindness, bitterness, and suspicion, etc. etc. Brother has turned on brother, friend on friend. It has been, in fact, civil war.

At a time when our coffers are pitifully empty, the battling has repelled major financial contributions to the club. And, like any war, this one has been highly expensive—using up tens of thousands of dollars and, more important, enormous amounts of talent, time, energy, and emotion—the kind of dedicated manpower which has brought about so many conservation gains meaningful to Americans of this generation and those to follow.

And while our membership has been occupied so vigorously with election issues (and serious issues they have been), the club's downward financial trend has continued. Indications are that the final figures for 1968 will be bleak. The upswing in our cash-flow anticipated by the first of March 1969 has not materialized. Expected profits from book sales are not there. We have cut back sharply on our financial commitments, but it is a hard fact that our fiscal condition has not improved materially in the past six months.

Thus, the most critical election in the club's history brings us face to face with the most critical moment in club affairs. We hope sincerely that the election has settled—once and for all—the controversial issues which have so deeply divided us. We cannot afford this kind of division any longer if we are to survive. I urge all Sierra Club members—winners and losers alike—to "cool it." Let personal by-gones be by-gones. Let us be aware that our differences are less important than our common purpose. Let us tap our capacity for proceeding in constructive action—and get back to the job. We have gravely important things to do.

We must regain our solid footing and redefine where we are going to move. We must recoup our losses. We need to get on with the necessary reorganization of the club and particularly with the establishment of a sound financial base. All our great ideals and goals will be lost if we are not a viable organization.

Out of war can come major achievements. Out of illness can come greater strength, greater understanding, and new inner resources. Let us, out of our own immolation, progress—sadder, perhaps, but stronger, more deeply committed, and wiser.

EDGAR WAYBURN



# Sierra Club Bulletin

APRIL, 1969 Vol. 54 — No. 4

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

President's Message	Edgar Wayburn	2
News		3
WILDERNESS CONFEREN	CE WRAP-UP	
	George M. Hall	5
CRISIS ON THE EEL	T. H. Watkins	8
GROWTH OF A HOPE		12
Annual Banquet	Luella Sawyer	13
Book Reviews		14
Washington Report	W. Lloyd Tupling	16

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.

DIRECTORS
Edgar Wayburn
William Siri
Ansel Adams Richard Leonard Eliot Porter Lewis Clark Luna Leopold David Sive Frederick Eissler Martin Litton Laurence Moss
Aubrey Wendling Chairman, Sierra Club Council
David Brower . Executive Director Michael McCloskey . Conservation Director Julie Cannon . Associate Editor . Connie Flateboe . Editorial Assistant

Published monthly by the Sierra Club, 1050 Mills Tower San Francisco, California 94104. Annual dues are \$9 (first year \$14), of which \$3 is for subscription to the Bulletin. (Non-members: one year \$5; three years \$12.00; single monthly copies, 50c; single Annuals, \$2.75.) Second-class postage paid at San Francisco, California. Copyright 1969 by the Sierra Club. All communications and contributions should be addressed to Sierra Club, 1050 Mills Tower, San Francisco 94104.

\*Reg. U.S. Pat. Off.

### Sierra Club's John Muir Award to Sen. Jackson

Senator Henry M. Jackson, chairman of the Senate Interior Committee, received the Sierra Club's John Muir Award in ceremonies highlighting the

11th Biennial Wilderness Conference March 15 and 16 in San Francisco. The award, made annually since 1961, is given for public service in the field of conservation. The club



honored Sen. Jackson for his work in the field of conservation legislation dating back to the Wilderness Act of 1964. The Senator was instrumental last year in getting bills passed to create the Redwood and North Cascades national

parks. Senator Jackson is shown with club President Edgar Wayburn, at left, who presented the award.

## Club, Hickel support Paiute water rights

Important disagreements have arisen over a long-considered compact between California and Nevada governing distribution of water from Lake

Tahoe and the Truckee, Carson, and Walker rivers. Tahoe's outflow passes eastward via the Truckee River to Pyramid Lake, home of the Paiute Indians and described by the National Park Service as "the most beautiful desert lake in the United States." To maintain its present level, Pyramid Lake needs 300,000 acre-feet of water per year; it now receives only about 215,000, resulting in an average lowering of the lake's level by 11/2 feet per year. As originally drafted, the compact only guarantees Pyramid Lake 30,000 acre-feet per year, and any increased allocation is totally dependent on Nevada law. In testimony before the California Assembly Natural Resources Committee, Sierra Club Conservation Director Michael McCloskey said, "By making water allocations to Pyramid Lake totally dependent on Nevada law, the federal government's future influence will be minimized. The federal government is the trustee for the Indians, and as such has the duty to work under federal law and through the federal courts to see that Pyramid Lake gets the water it needs. . . . The compact should provide that Nevada's water will be allocated not only under its own law, but also keep open the possibility that further federal law may be made which will bear on the water rights of the Pyramid Lake Indians." Interior Secretary Hickel joined in supporting the Indians' water rights and opposing the compact as it is presently drafted, saying, "Utmost consideration must be given to the future of Pyramid Lake as being the rightful home and fishing grounds of the impoverished Indian tribe . . . . "

## Drilling resumed, Santa Barbara goes to court

After setting aside a 22,000-acre nodrilling reserve in the Santa Barbara Channel, Secretary of the Interior Walter J. Hickel gave the go ahead

for three oil companies to resume drilling on five federal offshore leases. The city of Santa Barbara and Santa Barbara County will file a joint lawsuit in federal court in Los Angeles challenging the constitutionality of the federal act governing oil drilling on the continental shelf. The lawsuit will also charge that Secretary Hickel's order permitting drilling on five of 71 offshore sites in the channel is an "abuse of discretion." In a telegram to the Secretary, the Sierra Club pointed out that the oil slick had covered more than a million acres of the channel and the 22,000-acre no-drilling reserve "represents conservation of merely 2 percent of a tragically abused offshore area."

## Tunney to join divers in probe of Channel

Representative John V. Tunney, D-Calif., joined with divers from Jacques Cousteau's aquanaut crew in an underwater probe of oil damage in the

Santa Barbara Channel. The expedition, sponsored by the Sierra Club and undertaken on April 4, was to gather photographic evidence on the oil leak that continues to seep at the estimated rate of 1000 gallons a day from the fissures below Union Oil Company's Platform A. Rep. Tunney, a member of the House Interior Committee, is a leading proponent of bills in Congress to establish a marine wilderness in the Santa Barbara Channel which would permanently prohibit drilling operations. He is also sponsor of a bill to establish a Channel Islands National Park. An experienced diver, the Congressman plans an underwater hike in the vicinity of Anacapa Island to examine the effect of oil-soaked straw on the rich marine gardens there. The straw was used to help contain the oil slick and now is reportedly coating the ocean floor.

# **Red River Dam** alternate site

Support grows for In a letter of March 21 to Senator John Sherman Cooper, R-Ky., President Nixon said he has asked the Bureau of the Budget to give full considera-

tion to the proposal to build the already authorized Red River Dam at an alternate downstream site. Both Governor Louis B. Nunn of Kentucky and Senator Cooper have recommended the downstream site which would minimize the impact of the dam on the scenic Red River Gorge. Choice of the alternate site would have economic as well as ecological advantages. During recent hearings before the Subcommittee on Public Works of the Senate Appropriations Committee, Corps of Engineers spokesmen testified that all planning on the upper site has been suspended and that the Corps would need only \$900,000 of the \$1.9 million now in the 1970 budget for planning at the alternate downstream location.

# a no-new-parks policy victim?

Apostle Islands - The Apostle Islands Lakeshore, unanimously approved by the Senate last year, has run into trouble in new hearings this year before the Parks

and Recreation Subcommittee of the Senate Interior Committee. A Park Service spokesman told the committee, "While the preservation of the Apostle Islands area as a national lakeshore has merit, we believe that its establishment at this time must take into account certain problems, such as fiscal

limitations and land price escalation. . . ." The apparent withdrawal of Interior Department support for the Apostle Islands bill prompted Sen. Gaylord A. Nelson, D-Wis., to express fear that this official position might be the unveiling of a "no-new-parks for America policy." However, according to a report by Robert Cahn in The Christian Science Monitor, the change in Park Service policy was a last minute one. On the morning of the hearing the Park Service received a revised copy of a prepared statement that had been referred several days earlier to the Bureau of the Budget for clearance. A key paragraph inserted by the Bureau said, "As this committee well knows, there is a substantial backlog of recently authorized but unfunded areas administered by the Park Service and Forest Service. . . . We are very much concerned, given present and anticipated budgetary limitations, about the size of this backlog in comparison to the funds we can reasonably expect to be available in the years immediately ahead from the Land and Water Conservation Fund. This situation has slowed down or precluded land acquisition in a number of recreational areas already established, thereby compounding the problem because of the land-price escalation which has ensued." Last year Congress authorized appropriation of \$200 million for the Land and Water Conservation Fund over the next five years. But the outgoing Johnson Administration recommended appropriation of only \$154 million; the Nixon Administration has not yet indicated its attitude on appropriations for the Fund. Cahn states that "Informed sources caution that the Apostle Islands issue should not be taken as a sign one way or the other. The Nixon Administration is still in the throes of overall budget decisions. Until these are made, officials do not want to make any requests to Congress that might be the basis for more extensive funding than will be available."

# land fill operation

House Committee In a report released March 20, the holds up Potomac House Committee on Government Operations charged that the Interior Department violated the law last year

when it withdrew its objections to the granting of a permit to a private group to fill in a part of the Potomac River. The permit, issued last May by the Corps of Engineers, authorizes Howard P. Hoffman Associates, Inc., to fill in a 91/2 acre wedge of Hunting Creek, an arm of the Potomac River near Alexandria, Va., as a site for high-rise apartments. Hoffman's application for the permit was filed in 1963, and was held in abeyance for over four years because of opposition from the Fish and Wildlife Service and the National Park Service. This opposition was based on an extensive study of the proposed fill site by the U.S. Fish and Wildlife Service which reported the area to be the best of the few remaining waterfowl habitats in the Washington metropolitan area, affording "an unsurpassed opportunity for the conservation, enjoyment, and study of aquatic life in the vicinity of our Nation's Capital." However, the Interior Department withdrew its opposition last year. According to the Government Operations Committee report, the Interior Department violated the Fish

and Wildlife Coordination Act when it withdrew its opposition to issuance of the permit. The Coordination Act requires the Department to advise the Corps of Engineers concerning proposed fills of navigable water, such as Hunting Creek, on the basis of the Fish and Wildlife Service's studies and investigations. The committee report recommends that the Army Corps of Engineers issue an order to Hoffman Associates to show cause why the fill permit should not be revoked as having been issued in violation of the law and because its continued existence is contrary to the public interest. At the request of the Corps of Engineers, and pending action by the House Committee, Hoffman has not yet begun fill operations.

### Conservationists seek Alaska committee

As a result of seminars on Alaskan wilderness and wildlife at the 11th Biennial Wilderness Conference of the Sierra Club March 15 and 16 in San

Francisco, conservation leaders telegraphed President Nixon urging him to appoint a blue ribbon committee "to review the impact on Alaska's environment of massive oil development and timber harvesting, along with the web of new transportation facilities they will bring." The telegram noted that "the accelerated exploration and development of oil and timber resources without the benefit of environmental planning, is destroying irreplaceable social, ecological, historic, scientific, aesthetic, wildlife, and wilderness values." The proposed blue ribbon committee would recommend to the President legislative and administrative action needed to preserve the delicate Alaskan ecology.

### **Harold Bradley** elected to USSA Ski Hall of Fame

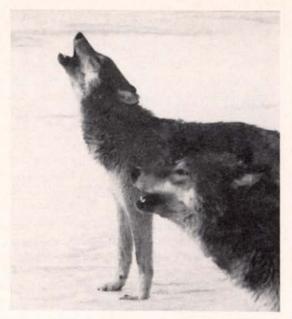
Former Sierra Club President Harold C. Bradley has been elected to the United States Ski Association National Ski Hall of Fame in the ski sport

builder category. Dr. Bradley, known throughout the ski world as "The Grand Old Man of American Skiing," helped pioneer skiing in Wisconsin, Idaho, Colorado, and California.

### Advance party to the Hindu Kush set for August

Forerunning the club's own 1970 outing, Jack Dozier, Sierra Club member and veteran leader of two expeditions to the Hindu Kush, proposes an ex-

peditionary backpack trip in the most isolated portions of this high range during August, 1969. The planned route of travel covers 200 miles by jeep from Kabul, Afghanistan; 150 miles on foot paralleling the Pakistan frontier; and crossing and recrossing the Indus-Oxnus divide over two 17,000foot passes. The second ascent of Koh-i-Marchech (21,200 feet) will be attempted by a portion of the party as well as first ascents of lesser peaks in the 18,000- to 19,000-foot range. A few additional participants are sought to round out a ten man group and qualify for reduced air rates. The estimated all-inclusive cost for the month round trip from New York (via London) is \$1000. Interested persons are asked to write Jack Dozier, Wells Fargo Bank Building, Stockton, Calif. 95202.



Canadian timber wolf photos by D. H. Pimlott.

And when on the still cold nights, he pointed his nose at a star and howled long and wolflike, it was his ancestors, dead and dust, pointing nose at star and howling down through the centuries and through him. And his cadences were their cadences, the cadences which voiced their woe and what to them was the meaning of the stillness, and the cold, and dark.

— Jack London

# Wilderness Conference

# Wrap-up

by George M. Hall

ALASKAN WILDERNESS AND WILDLIFE and their immense and rapid destruction were the dominant themes of the Eleventh Biennial Wilderness Conference held at the Hilton Hotel in San Francisco March 14–16. The conference was co-sponsored by the Sierra Club and the Sierra Club Foundation.

"I for one do not give our huge de facto northern wilderness long to survive," Dr. Robert B. Weeden, president of the Alaska Conservation Society, told the more than 1500 people in attendance. Weeden and other speakers discussed the vastness and remoteness of Alaska that once led planners to minimize the adverse effects of wholesale development of Alaska's timberlands and northern tundra plains. Several conference speakers stressed that man's capacity to destroy wilderness is far greater today than it was when the contiguous United States was settled. Vast as Alaska is, the virtual elimination of wildlands, which took 50 to 100 years in the American West, can be accomplished in a generation in Alaska. There is little time left to insure that some of Alaska's wilderness and wildlife survive intact, conference participants stressed.

#### TIMBER

In Southeast Alaska trees are disappearing at an ever increasing rate. This area contains—besides its magnificent mountains, glaciers and fiords—superb old-growth Sitka spruce and hemlock forests, almost none of which have any prospect of preservation under current Forest Service regulations. Brock Evans, Northwest Conservation Representative of the Sierra Club and the Federation of Western Outdoor Clubs, spoke on this topic at the conference, and presented evidence that the Forest Service plans to cut 98% of the marketable timber in Southeast Alaska. This includes all the finest stands of old-growth forest. Such clear-cutting policies will denude much of the finest wilderness, including the beautiful fiords, on the south Alaska coast.

Evans describes this area as "like a hundred North Cascades rolled into one—all at tidewater. To travel through it by boat is to experience a sense of endless forest and wild beach, probably not matched anywhere on this planet." Yet last summer we lost a million acres of this "in the stroke of a pen" through a massive 50-year timber sale to U.S. Plywood Co., Evans said. This sale is just one of five large sales in the last 15 years that includes about 4,150,000 acres.

Forest Service land management planning in Southeast Alaska has been made, according to Evans, with one primary goal in mind: "get the timber out, as fast as possible. All other resources, particularly wilderness, have taken a very distant back seat to this goal." Evans characterizes this policy as "single use" of land of "incredible scenic and wilderness value." It has left "the immense majority of the American public, which is not logging oriented (almost all of the timber cut goes to Japan) and which owns the national forests, holding the bag," he said.

The expansion of logging industry facilities in Southeast Alaska to cut these new sales areas for the next fifty years means, Evans argues, that considerably more timber will need to be cut than is granted in the allotments . . . since it is unlikely that the allotments contain enough board feet to keep the mills running. There is nothing preventing the timber companies, who are promised large quantities of timber at greatly reduced prices from expanding their mills beyond the capacity needed for the sale. Mills in Sitka and Ketchikan have already done this. Thus, the demand for more timber to feed an expanding industry will, Evans believes, result in more sales, and the not very distant cutting of most of the marketable timber in Southeast Alaska.

That this unhappy picture of forest decimation in Alaska is not incorrect was suggested by an address given at the conference by Alaska Regional Forester W. Howard Johnson. Johnson devoted much of his talk to the "availability" of lands in the two Southeast Alaska National Forests for wilderness classification. "It is obvious to me that the value and need of national forest land for wilderness must be conditioned on and balanced against the need for other uses," Johnson said. He described the wilderness "dilemma" as "creating areas of non-use through Wilderness classification." It became clear in subsequent remarks that Johnson is in favor of "non-use" only when there are no "conflicts" or "limiting conditions," i.e., when there is no other possible use of the land and its resources.

Evans listed various "things we can do," some of which related directly to the Wilderness Conference. (1) Give strong support to the growing conservation movement in Alaska. (2) Support the establishment of a Scenic Resources



Review Commission to "make recommendations as to scenic and wilderness areas to be set aside immediately." (3) Seek a Congressional investigation of timber sale practice and procedure in Southeast Alaska, particularly the committing of land to single use for long periods of time. "There is still a chance to do in Alaska what we did not and could not have done anywhere else. I hope that we will do it," Evans said.

OIL

Dr. Robert B. Weeden spoke at the Wilderness Conference on the rapid destruction of northern Alaska landscape, largely by oil prospecting and its accompanying use of tractor trains. These vehicles tear up tundra, which at that latitude erodes and does not recover. Feed for wildlife, particularly caribou, diminishes, and wildlife must then restrict their migration or die out. Big as Alaska is, the oil industry's technical and financial resources are even more impressive. "In the space of a few months, oil explorations have destroyed the wilderness character of an area in northern Alaska bigger than the State of Massachusetts," Weeden said. Such massive prospecting is conducted with no thought of other possible land use or of the large-scale ecological damage it will cause.

Weeden believes that on the basis of present knowledge we can predict some of the destructive aspects of oil recovery in the Arctic. According to Weeden, the fragility of vegetative cover in the Arctic means that it is "thin and easily destroyed. When bare earth is exposed, it thaws more deeply, lumps and erodes. The healing process is very slow." This is only one form of "habitat degradation." Another is mining rivers for gravel, a key resource in Arctic development since it is widely used as a base for roads, airstrips, drilling rigs, pipelines, and camps which otherwise would sink into the thawing tundra. The result is ruined spawning beds, blocked channels, and silted rivers.

Weeden cited other ways wildlife habitat will be degraded; "with huge volumes of oil being pumped, refined, stored and transported, inevitably, some will get loose." A 48-inch diameter pipe (above ground), the type intended for use in transporting northern Alaska oil, holds 496,000 gallons per mile. Pipelines themselves present special problems. Four feet in diameter and laid on top of the ground, they form a serious barrier to migrating caribou.

"I am convinced that the discovery of oil has telescoped the margin of time for wilderness preservation in Alaska into a very few years," Weeden said. The oil strike is by far the largest ever to be found in North America, and its development is inevitable. Weeden thinks its destructiveness can be minimized by regulations restricting the use of tracked vehicles and setting up federal and state guidelines on how

In the foreground, Dr. Lee M. Talbot, Smithsonian Institution field representative for International Affairs in Ecology and Conservation, and his wife Marty, a research associate at the Smithsonian, join the audience of over 1500 who attended the Eleventh Biennial Wilderness Conference. The Talbots were panel members for the opening session.



prospecting and extraction operations are to be conducted. "Skeptical about the amount of self-policing industry would do if left to its own devices," Weeden suggests an alternative: "a sliding scale of regulatory restrictions placed on industry's activities," the most stringent to apply in areas where wilderness and wildlife values are exceptional. In terms of northern Alaska, he argues that a large part of the Arctic Wildlife Range should be declared wilderness. Other areas containing large wildlife populations should be prospected only by helicopter. With more regulatory power, on-the-spot inspection, and industry cooperation, wildlife and wilderness protection can be achieved, he feels.

#### POLLUTION AND POPULATION

"Habitat degradation" was the terminology Weeden used to describe the pollution of a large wilderness environment. This same phrase appeared repeatedly throughout the conference, at times on a much larger scale than Alaska: the entire earth "habitat" is being degraded by world-wide forces that will make wilderness preservation impossible anywhere, Dr. Paul R. Ehrlich, professor of biology at Stanford University, maintained. Population and pollution control is an essential preliminary to any natural preservation system, he said. He explained that smog, weather modification, and chlorinated hydrocarbon pollution were all world-wide problems and that "each and all of them threaten every national park and preserve. By accelerating the normal patterns of climactic change, we are threatening the redwoods as surely as if we were attacking them with axes."

John Milton, ecologist with the Conservation Foundation, examined the same dilemma. "Wilderness faces the prospect of being swallowed by the twin appetites of individual desires for more material goods and a rising tide of individuals," he said. Fundamental to the misconceptions leading to apparent disaster for both man and his environment is what Milton called the "infinite growth assumption." Forming the backbone of almost all economic theory, this view pervades the rush for development in Asia as much as it dominates planners in the United States.

The goal of the conference was to examine the problems of the last great wilderness expanses of the United States. From left are Dr. Paul R. Ehrlich, professor of biology, Stanford, conference keynoter; Dr. Daniel B. Luten, lecturer in geography, University of California at Berkeley, conference chairman; and Dr. Edgar Wayburn, president of the Sierra Club, who gave the welcome.

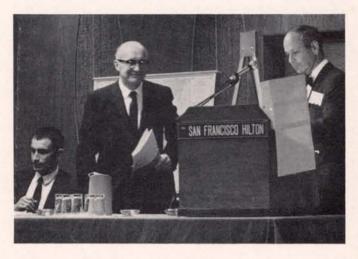
But the end of this mass melée toward more and more people and correspondingly more and more resource depletion, is coming soon, Milton predicts. The earth is not an infinite system, and, as our technology (and thus our ability to consume the earth's wealth) and population expand at a geometric rate, a point is reached where the natural environment is altered sufficiently to be unlivable. The result is mass death from atmospheric changes, pollution, and starvation. Instead of this calamity, Milton urges, "we must make the transition to a society where growth of technology, growth of resource demand, growth of population, and growth of economic greed are supplanted by a focus on developing and sustaining a dynamic equilibrium between human society and the biosphere that supports it."

Controlling man's expansionist propensities is thus the only ultimate means for wilderness to survive, and it is this course that will terminate the endless battles to "save" this or that piece of scenic landscape. "To plan for protecting a global system of wilderness reserves in isolation from the irresistible forces of environmental change is a tragic delusion," Milton concluded.

The Eleventh Biennial Wilderness Conference opened and closed with the lingering howl of a lone wolf. H. Albert Hochbaum, director of the Delta Waterfowl Research Station in Manitoba, Canada, played a tape recording made of wolves in the Canadian wilderness. He explained that the wolf is saying to his kind: "Here am I; where are you?" When the mournful cry rang out in the auditorium of the San Francisco Hilton in a country where except for Alaska and Minnesota that sound is heard no more, the innocence and the irony of it were as forceful as anything said at the conference. Man must learn the answer to this call from the wild—and soon—before all wilderness and wildlife vanish.

Work is in progress to publish the proceedings of the conference. The Bulletin will carry an announcement when the book is available. — Ed.

Mr. Hall, a freelance writer, has served as publicity director for a number of Sierra Club-sponsored events, including the 11th Biennial Wilderness Conference.



# Crisis on the Eel

by T. H. Watkins

On the Middle Fork of the Eel River, 600 miles north of Los Angeles, the U.S. Army Corps of Engineers and the California Department of Water Resources want to build a dam. Its name would be Dos Rios, and it would be 730 feet high. Its purposes are defined by the Corps of Engineers as follows: to "reduce substantially future flood damages in the Eel River Basin; provide additional water supply to meet the State of California Water Project requirements which are required by about 1985; provide a potential for hydroelectric power; and meet the expanding public need for water oriented outdoor recreational opportunities." The entire project appears to be an enormous miscalculation.

#### I THE POWERS OF OBFUSCATION

The dam would destroy one of the few living rivers left in California. It would flood Round Valley, the town of Covelo, the Round Valley Indian Reservation, more than 400 archeological sites, and 14,000 acres of agricultural land potentially worth over three million dollars annually. The dam will cost far more than the \$398,000,000 projected by the Corps, and the project's annual cost may exceed any beneficial return by as much as 25 percent. Its water would be at least as expensive, and possibly more expensive, than water from any one of several alternate sources. Only 5 percent of the project is allocated to flood control. The dam is expected to produce only 4,800 kilowatts of hydroelectric power. Finally, the so-called "recreational opportunities" have the surrealistic quality of something out of *Alice in Wonderland*.

The project is facing some stiff competition. In addition to the Sierra Club, organizations and individuals who have expressed opposition or serious misgivings include the Mendocino County Board of Supervisors; the people of Covelo; the Indians of the Round Valley Reservation; the Save the Eel River Association; California Tomorrow; State Senator Randolph Collier; the Mendocino County Farm Bureau; the State Department of Fish and Game; the Mendocino County Flood Control and Water Conservation District; the State Department of Parks and Recreation; and many state newspapers, among them the San Francisco Chronicle and the Sacramento Bee. The State Senate's nine-member Committee on Water Resources on February 6 of this year reversed its earlier 6 to 3 recommendation of the project to a 5 to 4 vote against it.

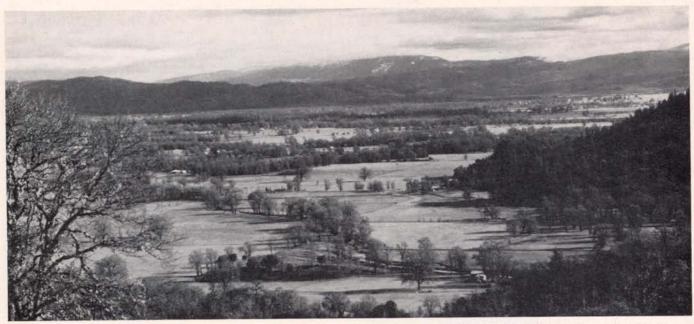
The Dos Rios Project, then, is neither popular nor realistic, but the Corps and the DWR, convinced of the infallibility of their logic and determined to have their way, are going to exert every ounce of their considerable muscle to obtain a go-ahead from the state.

The Corps of Engineers began eying the Eel River's development potential during the 1950's and received Congressional authorization for intensive studies of the region in 1956, following a period of particularly damaging floods. Expanded authorizations followed, and in 1964 the Corps received the support of the California Department of Water Resources. In December 1967 the Corps issued an *Interim Report* to the Army's Board of Engineers for Rivers and Harbors.

The Report called for a dam on the Middle Fork of the Eel three miles upstream from the town of Dos Rios—a "multiple-purpose" earthfill dam to be the largest in California, with a reservoir capacity of 7,600,000 acre-feet of water and an estimated total cost of \$398,000,000. California itself would be obligated to contribute a minimum of \$153,000,000 to construct the Grindstone Diversion Tunnel 21 miles through the Coast Range to carry water to Grindstone Creek in Glenn County, and from there to the Sacramento Delta Pool and ultimately to Los Angeles and the Metropolitan Water District.

The *Report* justifies the whole proposal by invoking the familiar "benefit-cost ratio," a device of statistical legerdemain which pits the cost of the project against the benefits to be derived from the sale of water (\$26,100,000 annually by the Corps' estimate), the savings in flood damage (\$1,500,000), the sale of hydroelectric power (\$210,000), and recreational uses of the reservoir (\$1,210,000). Based on these figures, the benefit-cost ratio was calculated to be 1.9 to 1—\$1.90 in benefits for every \$1 of cost. This may seem to be a comforting figure, until the *Report* itself is scrutinized—as it was shortly after its appearance by Professor Gardner B. Brown, Jr. of the University of Washington Department of Economics, at the request of the Round Valley Conservation League.

Using the *Report's* own facts and statistical methods, Brown calculated a .6 to 1 benefit-cost ratio—\$.60 in benefits for every \$1 of cost. The actual cost of the Dos Rios Project, he said, was underestimated by at least 12 percent (adding \$47,000,000 to the total), and the benefits were variously *over*-estimated: water supply benefits by more than 60 percent (an annual revenue loss of about \$18,500,000), flood control benefits by 17 percent (a \$260,000 loss), hydropower benefits by 20 percent (a \$40,000 loss), and recreation benefits by 10 percent (a \$120,000 loss).



Round Valley - the Indians called it "Meshakai," the Valley of the Tall Grass

The Corps replied to Brown's analysis of its Report on October 17, 1968 when Colonel Frank C. Boerger presented a 41-page "Statement" before a joint public hearing of the California Senate and Assembly Committees on Water Resources. Critics of the Interim Report were disposed of quickly: "In some of the testimony presented on the Dos Rios Project we have found that some facts have been introduced in a negative context so that it is not always clear that they are facts. . . . " After issuing this masterpiece of obfuscation, Colonel Boerger dismissed the ability of anyone but a Corps specialist to comprehend the mysterious institutional expertise compiled in the Report, implying that an economist like Gardner Brown has no business questioning the economics of dam building, mainly because he has never built a dam and couldn't possibly be expected to know what was going on.

"Judging from its response," Brown said in November, "the Corps of Engineers seems to be more concerned about justifying its original position than with making a genuine attempt to meet economically the water needs of Californians. Its reply, in my judgment, reflects an abrogation of public responsibility. . . . Through misquotation, selective omission, and other debating tricks, the Corps of Engineers has attempted to circumvent rather than confront the issues involved."

Those issues are large ones.

#### II MYTHS, REALITIES AND CREDIBILITY GAPS

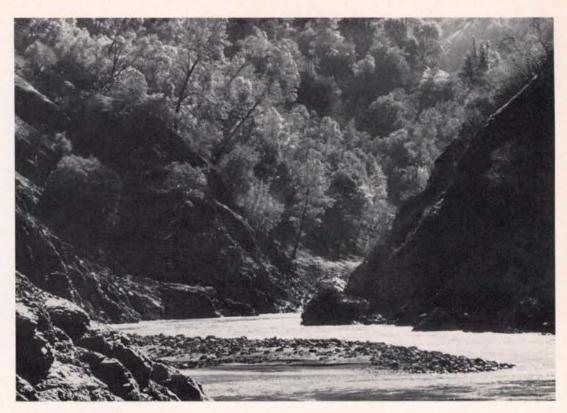
Of the numerous cost underestimates—\$47 million worth, or 12 percent of the project's actual construction costs—a few are the most glaring. The *Interim Report* has allowed only a 20 percent contingency for price inflation between 1967, when the project was first proposed, and 1980, the year it is expected to be completed, assuming no delays—

but during the *past* 13 years, according to the Bureau of Reclamation, construction costs of similar projects have actually risen some 30 percent. Round Valley, the *Report* claims, can be purchased for \$12,200,000, even though the Corps' own ally, the Department of Water Resources, has admitted that it can't be had for less than \$25,000,000.

The Corps based its interest payments for the dam on the proposition that it would take seven years to complete; again, the DWR expectation of nine years would seem to be more reasonable. And, as a final blow, President Lyndon Johnson, shortly before leaving office, proclaimed that the interest rate for projects such as Dos Rios should be raised from 3½ percent to 45% percent—which, according to the Corps' figures, would propel the interest and amortization costs from \$14,900,000 to \$21,000,000 a year. It remains to be seen what effect this change in interest rates will have on the project's attractiveness.

There is nothing new in all this. One study of the agency's past record has shown that the actual costs in 167 flood control projects have been as much as *double* those estimated by the Corps at the time they were authorized. "No private construction company could have remained in business with such a performance record," Gardner Brown pointed out, and while the economist prudently kept his under-estimate figure at 12 percent, a concerned taxpayer might wonder somewhat uneasily how close to 100 percent wrong the Corps might actually be in regard to Dos Rios.

It is when one contemplates the benefits that the Corps assumes will be forthcoming from the Dos Rios Project, however, that the whole argument for its existence breaks down. Only 5 percent of the project is allocated to flood control, even though the Corps has been waving this benefit in the taxpayers' eyes as if it were the main purpose of the dam. The dam's futility as a flood control device is indicated by



Middle Fork

Eel River,

at the damsite

Photos by Chuck Kennedy

the Mendocino County District Engineer's contention that had the Dos Rios dam been in existence during the great flood of 1964, the crest of the flood would have been lowered only two feet at the lower reaches of the river—from 30 feet to 28 feet. In any case, the dam would only provide standard flood control if it operated in conjunction with huge levees in the Eel River delta and a second large dam at English Ridge which is still on the drafting boards. Finally, the Report assigns a flood control benefit to Round Valley itself—which the dam will place under 300 feet of water.

Only 1 percent of the project is allocated to hydropower benefits. Its 4,800 kilowatts of power would supply only 263 average homes—hardly enough to mention.

A little over 4 percent has been allocated to recreation uses, predicated on the Corps' assumption that the lake created by the dam, together with a proposed "Indian Museum," will draw upwards of 2,000,000 tourist visits a year-but what possible recreational delights could be provided by a lake whose surface level could fluctuate as much as 150 feet in either direction as Dos Rios water is stored, then flushed out during the summer through the Grindstone Diverson Tunnel? Moreover, while the Corps has claimed it will take only eight years to fill the lake, William Penn Mott, California's Director of Parks and Recreation, has said it will take from 10 to 35 years, and has said further that "the state was going to be adamant in its refusal to undertake recreation maintenance and operation under the Dos Rios Project," according to the Ukiah Daily Journal. Altogether, the Corps' cheerful prediction of a recreation benefit exceeding \$1,000,000 a year seems overblown.

In the face of such facts, the real purpose of the Dos Rios

dam is obvious. It is designed to be an enormous tub where water for use in other parts of the state is to be collected and distributed—again, a questionable "benefit."

The Corps claims a water benefit based on the delivery of 900,000 acre-feet of Dos Rios water annually to the California State Water Project, even though the Report itself only claimed 700,000 acre-feet and the DWR has stated that except during dry years Dos Rios will export no more than 250,000 acre-feet. This water, the Corps maintains will be sold for \$26.00 per acre-foot, a price it claims is sufficiently competitive to make Dos Rios water profitable and saleable. The price includes a \$1 charge for transporting the water from Grindstone Creek to the Delta Pool, but the Corps has not included in its figures the additional cost of conveying the water from the Delta Pool to the terminus of the California Aqueduct (\$46 per acre-foot), and from there to the principal purchaser, the Metropolitan Water District (\$15 per acre-foot). These factors raise the actual price of Dos Rios water to \$87 per acre-foot.

There is every reason in the world to believe that by 1985, or shortly thereafter, sufficient water from alternate sources is going to be available in Southern California at prices considerably cheaper than Dos Rios' \$87. Desalinization of ocean water is the most dramatic potential alternative. Recent studies compiled by the U.S. Bureau of Reclamation to ascertain California water needs after 1980 (expected completion date of the Central Arizona Project) have determined that by 1995 it will be possible to produce, through the use of nuclear power, desalinated water for \$32.00 per acre-foot. If a maximum of \$20.00 per acre-foot is added for conveyance cost (maximum because the water can be pro-

duced locally) the potential price for desalinated water in 1995 will still be \$35 less than that for Dos Rios water.

Other alternatives are noted in an August 1968 report by the DWR entitled Present and Future Water Supply and Demand in the South Coast Area. This report makes several flat statements that severely undermine the justification for Dos Rios. According to the figures used in this report, the present and future water supplies of Southern California are in good condition: "Contrary to general opinion that there would be a supplemental water demand by 1990, present and future supply is adequate to 2000. This ten-year difference has important economic consequences, since it means that investment in new importation facilities [including the High Dos Rios Dam] can be postponed 10 years longer than was anticipated." By 2020, Southern California's water demand, according to the DWR report, will be about 5,800,000 acrefeet anually, while the supply of available water will be about 5,432,000 acre-feet. The DWR says the deficiency of 368,000 acre-feet can be compensated by the utilization of one or all of several sources, none of them outside Southern California: (1) the increased use of existing ground water, which the report says amounts to 960,000 acre-feet per year; (2) the reclamation and re-cycling of 500,000 acre-feet of waste water; and (3) the transfer of some 500,000 acre-feet of unused entitlement water from the California Water Project into ground basin storage-all methods whose cost would be far below that involved in building a 730-foot dam and carrying water 600 miles from Dos Rios.

The ones who will pay the most for Dos Rios water are those who need it most—the taxpayers of Southern California. Not only will they have to pay most of the project's cost if it is approved, they will pay more for Dos Rios water than for desalinated water. Prices for water from the several alternate sources mentioned above vary, but are generally expected to be lower than Dos Rios'.

#### III WATER, LAND AND PEOPLE

Money is money, but there are other values to be considered in regard to the Dos Rios Project, few of them measurable in greenbacks. A river would be destroyed. The dam would back water up in the canyons of the Middle Fork of the Eel for miles, and the flow of the main branch would be crippled.

The Eel is one of the few rivers in California with a summer steelhead run. The damage to fish life from the dam has already been admitted by the Corps, which proposes a hatchery to mitigate the loss of 8,000,000 chinook salmon eggs and 2,000,000 steelhead eggs. The Department of Fish and Game says this is not enough: such a hatchery would have to produce more than three times that number of eggs, given the salmon's uncommon sensitivity to disease and the inconsistent record of such hatcheries in the past. Similarly, the Corps proposes to mitigate the ecological losses resulting from the inundation of the river's canyons by purchasing 14,000 acres of land to replace wildlife habitat. Again, the Department of Fish and Game says this is not enough: at least 22,000 acres are needed. The fact of the matter is sim-

ple—the ecology of an entire region is going to be wiped out, to be replaced by a statistically convenient one-for-one land and salmon egg swap.

The Corps has been equally cavalier in its attitude toward the people most intimately involved in the project—the 1100 residents of Covelo and the 350 Indians of the Round Valley Reservation. The Corps proposes to rebuild the town of Covelo on a more convenient location, ignoring the fact that since the town's economy is inextricably tied to the agricultural pursuits of Round Valley, its very reason for existence will vanish with the valley's flooding. The Corps' treatment of Round Valley's Indians, moreover, has all the sinister overtones of the nineteenth century. It plans to pick them up wholesale and move them to a mountaintop reservation, where none of them have ever lived, exchanging two acres of mountainous land for every acre of valley land taken away. There, those who wish to continue subsistence farming may do so on plots of marginally arable land; others will be instructed in the maintenance and supervision of an Indian Museum where, among other things, genuine tourists may watch genuine Indians weaving genuine blankets.

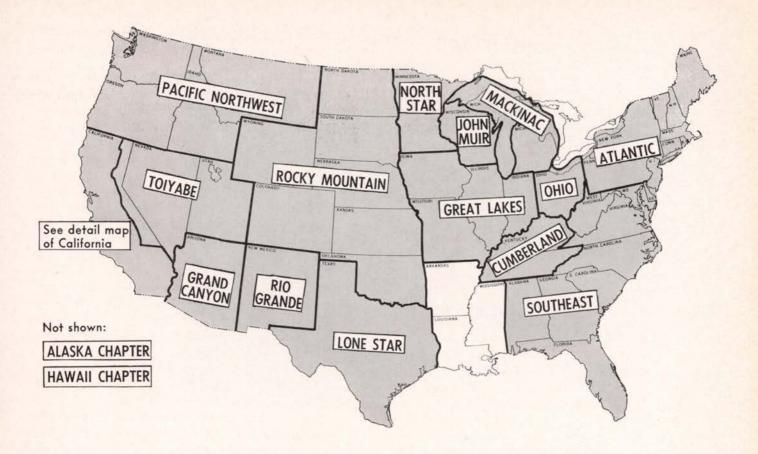
The Indians, understandably, object. They are a people of pride and independence. They have done well living on the edges of the white man's hectic world, working with the farmers of the valley and retaining withal that sense of identity with the land around them that made the California Indian the most serenely natural being ever to inhabit the boundaries of the state. They consider the Corps' plan an insult, as they should. The Covelo Indian Council has described the proposal as a "disruption of heritage," and rejected it outright as being "unfair and unjust to the Covelo Indian Community." As a final insult, "Lake Dos Rios" would flood 400 ancient Indian burial sites, some that may be 9000 years old, a prospect loudly deplored by anthropologists and archeologists.

What is the price of a lost heritage, or of history aborted? The Dos Rios Project is illogical, ruinously expensive, predictably obsolete, and brutally destructive. Its very proposal places the economic framework of the second phase of the California Water Project under suspicion.

"Continue until you get to the end, then stop," the Red Queen told Alice. It is time to stop the Corps of Engineers and the Department of Water Resources, and the place to stop is Dos Rios, before the integrity of the whole North Coast region is violated piecemeal, from the Eel to the Klamath.

It can be done. It was done at Marble Canyon on the Colorado. Enough public pressure exerted on the California Legislature during its current session can block any state approval of Dos Rios and halt the grinding course of water resource development in California. The choice is simple enough: we either want an intelligent, economical, and genuinely workable plan for the solution to our water problems, or the most expensive and useless plumbing system in the history of the world.

T. H. Watkins is managing editor of The American West.



# The Sierra Club-Growth of a Hope



"I will gladly attend the meeting on Saturday next at Mr. Olney's office and I hope that we will be able to do something for wilderness," John Muir said, and on that next Saturday, May 28, 1892, Articles of Incorporation were drawn up for a new organization, the Sierra Club. There were 182 charter members; today the club's membership exceeds 75,000. In 1911, after amendment of the bylaws to provide for the organization of chapters, the Angeles Chapter was formed. Today there are 28 chapters, covering all but three of the 50 states and including two Canadian provinces.

The year 1968, which saw creation of the Redwoods and North Cascades national parks, the Scenic Rivers and National Trails systems, and an increased Land and Water Conservation Fund, also brought record growth to the club. In the past year, seven new chapters were authorized—this is 25 percent of the total number of chapters. In 1968 new members joined the club at a rate of nearly 1500 per month. These statistics reflect a growing concern for the environment; they are the answer to that long ago hope "that we will be able to do something for wilderness."

The present boundaries of the club's chapters are shown on the accompanying maps. The Alaska and Hawaii chapters and the Canadian section of the Pacific Northwest Chapter are not drawn on the maps. There are as yet no chapters in Arkansas, Louisiana, and Mississippi. The chapters are listed below alphabetically, along with the year of formation, description of boundaries, and the membership total as of February 28, 1969.

Alaska (1968)-State of Alaska. 218 members.

Angeles (1911)—Los Angeles and Orange counties. 11,333 members.

Atlantic (1950)—States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, and New Jersey. 8149 members.

Cumberland (1969)—States of Kentucky and Tennessee. 377 members.

Grand Canyon (1966)—State of Arizona. 541 members.

Great Lakes (1959)—States of Indiana, Illinois, Missouri, and Iowa. 2032 members.

Hawaii (1968)—State of Hawaii. 238 members.

John Muir (1963)—Wisconsin. 677 members.

Kern-Kaweah (1952)—Kings and Kern counties, and the portion of Tulare County south of the point of intersection of Fresno, Kings, and Tulare County boundaries or within Sequoia National Park. 435 members.

Loma Prieta (1933)—San Mateo, Santa Clara, Santa Cruz and San Benito counties. 9992 members.

Lone Star (1965)—State of Texas. 771 members.

Los Padres (1952)—Santa Barbara and Ventura counties. 1335 members.

Mackinac (1967)—State of Michigan. 748 members.

Mother Lode (1939)—Shasta, Tehama, Glenn, Butte, Colusa, Sutter, Yuba, Yolo, Sacramento, Amador, San Joaquin, Calaveras, and Stanislaus counties; the portions of Sierra, Nevada, Placer, El Dorado, and Alpine counties west of the Sierra Crest; the portion of Tuolumne County not within Yosemite National Park; the portion of Siskiyou County east of Duzel Rock; and the portion of Solano County east of Napa County. 3139 members.

North Star (1969)—State of Minnesota. 538 members.

Ohio (1969)-State of Ohio. 897 members.

Pacific Northwest (1954)—British Columbia, Alberta, Washington, Oregon, Idaho, and Montana. 2189 members.

Redwood (1958)—Del Norte, Humboldt, Trinity, Mendocino, Lake, Sonoma, and Napa counties; the portion of Solano County west of the most eastern corner of Napa County; and the portion of Siskiyou County west of Duzel Rock (approximately five miles west of U.S. Highway 99). 1044 members.

Rio Grande (1963)—State of New Mexico. 504 members.

Riverside (1932)—San Bernardino and Riverside counties. 997 members.

Rocky Mountain (1965)—States of Colorado, Wyoming, North Dakota, South Dakota, Nebraska, Kansas, and Oklahoma. 1010 members.

San Diego (1948)—San Diego and Imperial counties. 1874 members.

San Francisco Bay (1924)—Marin, Contra Costa, Alameda, and San Francisco counties. 19,024 members.

Santa Lucia (1968)—San Luis Obispo County. 198 members.

Southeast (1968)—States of Maryland, Delaware, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Alabama, and Florida and the District of Columbia. 2018 members.

**Tehipite** (1953)—Mariposa, Madera, Merced, and Fresno counties; the portion of Tuolumne County within Yosemite National Park; and the portion of Tulare County north of the point of intersection of Fresno, Kings, and Tulare County boundaries, but not within Sequoia National Park. 552 members.

Toiyabe (1957)—Modoc, Lassen, Plumas, Mono, and Inyo counties; the portions of Sierra, Nevada, Placer, El Dorado, and Alpine counties lying east of the Sierra Crest; and the states of Nevada and Utah. 660 members.

Ventana (1963)—Monterey County. 1190 members.

# Annual Dinner May 3 in Berkeley

All members of the Sierra Club and their friends are invited to attend the Annual Banquet Saturday evening, May 3. This will be the climax of the Annual Organization Meeting of the Board of Directors that weekend. Newly-elected Board members, Chapter and Council delegates, and others who are attending these meetings, will be present. The dinner will be at Berkeley's Claremont Hotel, an East Bay landmark famed for its old-world charm, flower gardens and breathtaking view of San Francisco Bay.

Starting at 6 p.m., there will be a reception with no-host cocktails, exhibits, and other attractions. At 7:30 p.m., guests will move to the Garden Court for a sit-down dinner. The new Board will be introduced at this time. Following dinner the crowd will adjourn to the Empire Room to Go Trekking in Nepal.

Leo LeBon, mountaineering world traveler, and his artist wife Maxine, both Sierra Club members, will show pictures of the 1967 and 1968 expeditions to Nepal. Mr. LeBon, also a member of the American Alpine Club, has climbed in Europe, South America, New Zealand, the Himalayas, the western United States, and many parts of Alaska. A number of Sierra Club people were on the Nepal trip with him.

The LeBons' camera will retrace some of the highlights of the trips. These include Katmandu, the Mt. Everest Base Camp location, glaciers, and lamaseries—all with a backdrop of peaks ranging from 25,000 to 29,000 feet.

Seating is limited to 750, so reservations should be made early. Tickets are \$6.00 per person and include admission to the reception, exhibits, dinner, and slide show. The Claremont has promised free parking in certain areas for Sierra Club members who arrive early. Valet parking will handle the overflow. To reach the Claremont, turn off the freeway at the Ashby Avenue-Walnut Creek signs. For those coming from the north, this is the first turn after the University off-ramp. Drivers coming from San Francisco or East Oakland, should watch for the turn-off after passing the MacArthur overpass complex.

Ticket orders, with check or money order made out to the Sierra Club Annual Dinner, *must* include a stamped self-addressed envelope. Send these to Luella Sawyer, 1050 Mills Tower, San Francisco 94104. April 25 is the deadline for all orders and no refunds for tickets will be made after that date. For additional information, call (415) 981-8634.

LUELLA SAWYER, Chairman Sierra Club Annual Dinner

# Book Reviews

VANISHING WILD ANIMALS OF THE WORLD. By Richard Fitter. Illustrated by John Leigh-Pemberton. 144 pages. New York: Franklin Watts, 1968. \$7.95.

The title is somewhat misleading. The book is concerned with 270 species of endangered species of mammals, but not with reptiles, birds or other animals.

Part One of the text briefly, but succinctly, describes how extinction happens. Repeatedly the author makes the point that man and destruction of the habitat are prime causes of extinction. Part Two gives a brief anecdotal description of the situations of endangered mammal forms arranged in the order of biogeographic realms. Reiterated here is the fact that for many species, little is known of their biology. Part Three, which tells the stories of mammals saved from extinction, is of particular interest to inhabitants of North America. The author discusses the Pribilof fur seal, pronghorn antelope, northern sea otter, American bison, gray whale, and the tule elk-all of which are North American species. Other species are discussed which have been saved from extinction in other parts of the world. Part Four covers the various methods of conserving what is left. This section, both educational and quite practical, should be of interest to everyone.

Illustrations are 43 color plates of paintings by John Leigh-Pemberton, and 29 line drawings. The reproduction of the paintings leaves something to be desired. Many of the plates (e.g., Square-lipped Rhino, Polar Bear, Kaibab Squirrel) give the impression that the texture of the canvas is showing through the paint. To find out what animal is represented in the line drawings the reader must refer to a list on page 10, since the name of the mammal is not given on the page with the drawing.

Mechanical shortcomings to the contrary, the illustrations are nevertheless effective, especially the colored plates. The plates, for the most part, are of little-known mammals, thus giving the reader an opportunity to become familiar with a species he may be unable to observe in any other way. Each plate includes a small regional map illustrating the present range of the animal represented, the familiar name of the species as well as its scientific name, and a brief comment on pertinent facts about the animal.

There is no alphabetical index to the species discussed in the text, but there is a very good appendix which lists the animals in systematic order, noting each specie's present status with regard to range and extinction potential, and giving the plate or page number in the text. In addition, each specie is given a number which refers to its geographical location on a world map which appears in the same appendix. Appendices also list conservation organizations and additional reading on the subject.

This book is a worthwhile addition to the personal li-

brary—enjoyable to skim as well as to peruse. It should be stimulating to the young as well as the not-so-young, and is recommended reading for those who would save the natural aspects of our international heritage. It should be mandatory reading for those who do not understand the concern of those of us who realize that the depletion of irreplaceable resources is all too frequently an irreversible as well as irresponsible occurrence.

Kenneth Innes Lecturer in Biology University of San Francisco

CHALLENGE OF THE LAND. By Charles E. Little. 151 pages. New York: Open Space Action Institute, 1968. \$3.75.

In the year 2000, the population of the United States will be double its current figure. Last year President Johnson challenged the housing industry to construct six million dwelling units within the following twelve months. Urban growth to accommodate these statistics is creating serious problems in our expanding communities. An insufficient amount of land is being retained as recreation space, green space, or simply as visual relief to the hastily-erected and often ill-conceived housing invading the countryside.

Little's book is an excellent introduction to the realities of open space problems confronting our urban-suburban communities. It serves as a guide for officials responsible for providing open space within their communities. Citing both successful and unsuccessful experiences of other suburban communities, Little clearly explains the hidden deterrents to land acquisition.

These examples of community action are not presented solely for the purpose of adoption by a town or suburb, but rather to act as a positive influence on officials desiring to establish a similar program of land acquisition. Little describes the New York Metropolitan Region's towns and suburbs. Because this area was chosen for the multiplicity of political and social forces affecting communities in the region, the resultant solutions to their open space problems are more meaningful. One effective method of obtaining land—a method Little stresses throughout the book—is action. Action not just at the local governmental level, but action involving the taxpaying citizen as well.

The various legal documents developed from the actions of these communities are contained in the appendix. They are presented in total so a reader may become familiar with the process of land acquisition and preservation, including the laws, agreements, ordinances, easements, acts, and covenants that have developed from these actions.

A consideration noticeably absent from the book, however, is a mention of the relationship of open land to housing. Open land alone is not a solution, just as housing alone is not a solution to the problem of adequate habitation. Perhaps discussion of successful examples of open land and housing developed together would be pertinent to the book.

Little brings strong evidence to the support of preserved

open land. A dollar value placed on it, realized as a tax relief, presents a strong case for preservation when compared to the development cost of utilities for the same land which necessarily must be realized as a tax increase. Some undeveloped land is often better left in its natural state for its role in the ecological balance of the area.

Challenge of the Land is recommended reading for any person concerned with the preservation of open land. Although written primarily for community officials, the book suggests a means of participation for the concerned citizen. The outlines for action are there for both, because the acquisition of land cannot be accomplished by local officials alone. By establishing committees and co-ordinating their activities with local government, an effective land preservation program can be developed to prevent the unnecessary disappearance of remaining open space areas.

PETER K. SMITH Architect, San Francisco

SIERRA NORTH. By Karl Schwenke and Thomas Winnett. Illustrated. 180 pages. Berkeley: Wilderness Press, 1967. \$2.95.

SIERRA SOUTH. By Karl Schwenke and Thomas Winnett. Illustrated. 217 pages. Berkeley: Wilderness Press, 1968. \$2.95.

These two guide books for wilderness trip planning in the Sierra Nevada are for the man who wants a Sierra vacation but is looking for ideas about new places to go. Each compact volume describes 100 itineraries for the Sierra knapsacker.

Like all good guide books, these are based on careful firsthand research of the areas described, and it's hard to find fault with the author's recommendations. One of the real virtues of the two volumes is the listing of short weekend trips of the type that mountaineers continually fret about when faced with the reality of just a few days' vacation and an urge to get into the back country.

These convenient little books are welcome additions to established literature on Sierra trails. Helpful features of both books include trail profiles and trip cross-reference tables giving recommendations on the number of hiking days, the preferred season, and the pace of each trip.

> R. V. GOLDEN Sierra Club Staff

WILL SUCCESS SPOIL THE NATIONAL PARKS? Robert Cahn. Photographs by Norman Matheny. 56 pages. Boston: The Christian Science Publishing Society, 1968. \$1.00. Traffic signals in the national parks? Cahn's excellent 16-part series on management and use patterns in the parks appeared in *The Christian Science Monitor* between May 1 and August 7, 1968, and is now available from the Society at One Norway Street, Boston, 02115, for \$1.00. Recommended for past and potential park visitors. Park status does not resolve land management problems but cre-

ates new ones. Cahn describes them; it is for us to educate ourselves to the solutions.

BIOMETEOROLOGY. Proceedings of the Twenty-Eighth Annual Biology Colloquium, April 28-29, 1967. Ed. by William P. Lowry. 171 pages. Corvallis: Oregon State University Press, 1968. \$5.00. Theme of the colloquium was "Weather and Life"; the proceedings analyze biometeorological research data and environmental physics to determine the effects of weather manipulation on all living things.

HUMMINGBIRDS AND THEIR FLOWERS. Karen A. Grant and Verne Grant. Illustrated, 115 pages. New York: Columbia University Press, 1968. \$17.50. Emphasis is on the flowers; the birds enter as part of the pollination system. An interesting, readable book-monograph, research for which was supported by a National Science Foundation grant. Disappointingly small plate size obscures details in the photos.

RACE AGAINST FAMINE. Melvin A. Benarde. Illustrated, 97 pages. Philadelphia: Macrae Smith Company, 1968. \$4.75. We can't feed all the people now. How can we expect to handle twice as many in the 21st Century unless population growth is controlled? Benarde's survey of food production costs and methods reminds us of the magnitude of the problem, that just research on Fish Protein Concentrate and Spun Vegetable Protein won't feed 7 billion people in 2000, 14 billion in 2035, 28 billion in 2070. . . .

BETWEEN PACIFIC TIDES. Edward F. Ricketts and Jack Calvin. Revised by Joel W. Hedgpeth. Illustrated, 614 pages. Stanford: Stanford University Press, 1968. \$10.00. A classic work on marine biology—tide pool and shore creatures. Color plates, new illustrations, and a glossary were added to this revised and expanded fourth edition.

DOWN THE WILD RIVER NORTH. Constance Helmericks. 501 pages. Boston: Little, Brown, 1968. \$8.95. An engrossing account of the experiences of a mother and her two teenage daughters during two summers' canoeing down the Peace and Mackenzie rivers in Canada; their northernmost penetration of Canadian wilderness was inside the Arctic Circle. The expedition was financed by the book's publishers.

Washington Report continued from outside back cover

paign have not been completely favorable to the industry. For example Secretary George Romney of Housing and Urban Development revealed plans for encouragement of mass production housing techniques which would utilize as substitutes for wood such products as steel and aluminum in construction of 250,000 to 350,000 low-cost housing units a year. Could be that in their zeal to "put preservationists on the defensive," industry leaders are booby-trapping themselves.

# Washington Report

by W. Lloyd Tupling

The nation's capital was exposed in March to a malaise best described as "The Over-ripe Tomato Syndrome."

The designation comes from a paragraph in a full-page newspaper ad of the forest products industry. It stated: "Not cutting trees that are ready for harvest is much like delaying the harvest of tomatoes when they are ripe for market. And just like tomatoes, over-mature timber rots and goes to waste." Apparently, the foregoing simile is based on the well-known multiple-purpose, sustained yield value of tomatoes for fiber, forage, recreation, wildlife and watershed protection—attributes sometimes assigned to our National Forests.

But in the wonderful world of Washington, it is not what things are but what they are made to appear to be that is important. Thus, the tomato-timber analogy conforms to other convoluted rationalizations which gain acceptance here. The industry ad goes on to say: "The shortage of lumber and plywood is so serious that we will wind up the year with 200,000 families unable to find new housing. A solution now lies in the hands of the Federal government."

The solution suggested by the industry is to "find a way to free up a portion of the untapped harvestable allocation." This euphemistic language, of course, immediately evokes from conservationists an image of chainsaws whining in Muir Woods. Their fears may be justified because the "over-ripe tomato" ad did not happen as a coincidence and is only part of long-range public relations plans of the timber industry to shape Federal policies so as to increase cutting rates on Federal timber lands, to counteract withdrawals of public lands for parks and recreational uses, and to advocate "salvage and improvement cuttings within parks and other reserved areas." All of these objectives are spelled out in industry memoranda.

One such document relates that "at the invitation of the National Association of Home Builders a small delegation of lumber and plywood manufacturers and association representatives met with the NAHB Executive Committee in Houston on December 3 to discuss their forest products supply and cost problems. . . . One result was the establishment of a joint coordinating committee of the housing and forest products industries."

This marriage of interests was hailed as advantageous in another forest industry bulletin. It said: "The forest products industry is handicapped in resisting withdrawals of public lands from timber production for parks and recreational uses . . [because] industry motivation is often claimed to be maintenance of profit opportunity from cutting the timber under consideration. Home builders as spokesmen for the ul-

timate consumer of forest products and protagonists for low and medium cost housing are free of such taints. Their entry into the withdrawal war presents possibilities for more effective objection to new proposals and for opening up some new fronts for counter offensive . . . participation by home builder spokesmen in the hearings and related actions on park, wilderness and other types of withdrawals will add additional volumes of commercial timber . . . salvage and improvement cuttings within parks and other reserved areas could be made without impairment of scenic and recreational values. Advocacy of such cutting to satisfy housing needs would serve to dramatize the wood shortage and would put the preservationists on the defensive."

Putting the preservationists on the defensive seems to share equal billing with increasing the cut of publicly-owned timber in the industry's campaign. As the vice president of one timber industry association said in a letter to his boss: "We are to the point as a Nation where people will have to decide whether they want more recreation, more parks, more wilderness, or whether they want houses to live in and forest industry products to use in daily living. . . . As our work develops and our volunteer industry task force assembles in Washington and digs in for the long pull, I will keep you advised of developments."

Of course, this industry spokesman's view that we have a simple "either-or" situation in fixing policies for public land management is not in accord with the facts. As Sierra Club Northwest Representative Brock Evans pointed out at hearings conducted by the Senate Housing Subcommittee, "We need not sacrifice one national goal—the preservation and protection of the remnants of our vanishing natural beauty and wilderness—to further another national goal, of providing housing for our people." As a matter of fact, Evans said, in the four Pacific Northwest states which have the nation's greatest supply of commercial softwood timber, the areas for which the Sierra Club and other conservation organizations seek additional park or wilderness protection only contain 1.2 per cent of the sawtimber volume available.

It remains to be seen whether the industry program will succeed in urging Congress to increase immediately the National Forest allowable cut by 10 per cent, with additional 10 per cent increases each year for the next three years, as has been proposed. Despite the White House announcement that timber sales on federal land will be increased some 1.1 billion board-feet over the next 15 months, initial results of the cam-

Continued inside back cover