



Sierra Club Bulletin
JULY 1968

The consequences of delay
in establishing a redwood national park



Of Parks and Politics

Redwoods have always meant something special to the American people, and the national outpouring of public support for a Redwood National Park is probably unequalled in the annals of park battles. Culmination of half a century of efforts to protect and preserve the redwoods, this has been a highly dramatic, last-ditch fight. People have rallied to the redwoods' cause by the tens of thousands, and from every one of the 50 states. It is doubtful if a single member of Congress has been overlooked in the strong expression of almost universal public sentiment for the early establishment of a Redwood National Park.

The proposed North Cascades National Park has aroused almost equal popular enthusiasm. Recent congressional hearings were so top-heavy with park supporters that even the park's proponents were surprised.

It is obvious that these two park projects, both eminently deserving on their own merits, are not only needed but wanted sincerely by the people of the United States. Recognizing these facts, the Senate passed by a 77 to 6 majority a bill for a Redwood National Park (S. 2515), and, unanimously, a bill for a national park in Washington's North Cascades (S. 1321) in the current session of Congress.

It would seem only reasonable and logical that the House, where one-man-one-vote representation must surely respect the will of the people, would go and do likewise. In fact, there was speculation and optimism that the House, seeing certain limitations in the Senate bills, might well broaden this legislation. How did it happen then that the House Interior and Insular Affairs Committee dealt such a stunning blow to the Redwood National Park proposal in June, and put off action on the Cascades National Park pending further hearings? How could this committee report out a Redwood National Park bill which would be a travesty on the national park idea? How could it threaten to study the North Cascades Park to death? How could some of our best conservationist congressmen turn their heads away from these projects which they had previously supported so ardently?

The political facts of life are harsh: in our democratic system of government, parks, like pork barrels, are used as political pawns. They are used for bargaining. They are used for power plays. In our system, a single man on a single committee may have enough power to single-handedly call the shots. We will be well-advised to recognize these harsh facts.

At the same time, we would be fools if we simply accept them. We have been assured in Washington that "everything will be all right with the redwoods." We have been told not to worry, to "stay off the politicians' backs"!

We would be not only naive, but irresponsible, if we did as we have been asked. Our democratic system may allow for power plays with parks as pawns, but it still remains a democratic system, responsive ultimately to the voice of the people. If everyone who cares about the redwoods and/or the North Cascades contacts his congressman in time, America will have two great new parks. If, however, we simply wait patiently, we will be just as responsible for the possible loss of those parks as the manipulators in the committee rooms on Capitol Hill.

What happens to the redwoods, what happens to the North Cascades, and in the long run, what happens to the environment we live in, is still up to you and to me.

EDGAR WAYBURN



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

FRONT COVER: Senate's redwood park bill would include virgin redwoods in watershed of Lost Man Creek (top photo), but House bill would exclude them. Devastated area (left center of top photo, closeup below) is North Fork of Lost Man — park-caliber land until cutting began in 1966. Both photos by Donald Anthrop.

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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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NEWS OF CONSERVATION AND THE CLUB

House Interior committee's redwood park proposal — a victory for the axe

"The lumber companies won and the nation lost," said a *Los Angeles Times* editorial after the House Interior Subcommittee on National Parks reported out a 25,000-acre redwoods park plan. Less than half the size of the Senate park version, the House subcommittee's park proposal included two state parks and virtually limited private land acquisition to a quarter mile-wide strip along each side of Redwood Creek—a purchase plan more fitting a scenic rivers bill than a national park. Three days later on June 28 the subcommittee plan came before the full House Interior Committee. Prior to final approval of the subcommittee's report, the full committee adopted the amendment of Rep. William F. Ryan, D-N.Y., to add the area from ridge to ridge on each side of Redwood Creek in the Emerald Mile section, an addition of approximately 4,600 acres to the National Parks Subcommittee proposal. Rep. Ryan also offered an amendment for inclusion of Lost Man, Little Lost Man, and Skunk Cabbage drainages, but this was defeated by a 10 to 7 vote. The committee report on the redwood park bill was filed July 3 and was expected to come before the House of Representatives shortly. Conservationists hoped that this bill—smaller than any redwood national park bill introduced in Congress, including the Clausen bill advocated by the lumber companies—would be improved by amendments from the floor of the House.

Conference committee accepts House version of Land and Water Fund augmentation bill

Termed one of the most important conservation measures before Congress, the bill to refinance the Land and Water Fund (S. 1401) was first crippled by amendments in the Senate and shortly thereafter passed in a much stronger version by the House. The bill then went to a Senate-House Conference Committee where basically the conferees accepted the provisions of the House-passed bill, establishing a \$200 million annual base for the Fund over a five-year period. Revenues from outer continental shelf petroleum leases can be used for the Fund, if Congress fails to appropriate the full \$200 million from the general treasury. The conferees also decided to continue the sale of the Golden Eagle passports used for admission to federal recreation units for one more year. Conservationists have supported the House-passed bill as a means of financing an accelerated program of land acquisition for park and recreation purposes.

The molecular bomb—ultimate weapon in man's war against insects?

Hormonal insecticides, the product of years of research and now perhaps only five years away from commercial use, may be the ultimate weapon in man's war against the insect—a war expected to escalate during the predicted food crisis of the 1970's. These new biological pesticides are foreseen as safe, effective substitutes for the currently used toxic types of chemical insecticides which threaten to poison the environment and all other life on earth. Lawrence Lessing, writing in the July issue of *Fortune*, traces the development of hormonal insecticides from 1920 to the present, and explains the contributions to their discovery made in the labs of the world's universities, Harvard, Wisconsin, Cambridge, the Free University of Berlin, Japan's Tohoku University, and the Czechoslovak Academy of Sciences Entomological Institute, as well as other science centers. In his article, "A Molecular Bomb for the War against Insects," Lessing says, "The great promise of the new biological

approach is that it delves inside the living organism of the insect itself to identify the key molecules that control the creature's life. A deft application of these biological materials can derange or abruptly halt the insect's development, opening up the possibility of selectively controlling specific species of major pests without affecting other forms of life.

Texas Water Plan may draw on Mississippi River

According to a preliminary study undertaken by the Bureau of Reclamation, the High Plains region of West Texas will need to import 16.5 million acre-feet of water a year in order to meet its agricultural, municipal, and industrial requirements by the year 2020. To meet projected needs, the Bureau finds it physically feasible to transfer water from the Lower Mississippi River to the High Plains. Speaking against the plan, Senator Allen J. Ellender, D-La., said, "In my opinion it is a waste of money to try and figure out ways to transfer water from the Mississippi to west Texas and Arizona since this would involve moving the water 800 miles and lifting it 3,500 feet." Other sources of water being considered for the Texas Water Plan include several Canadian streams; the Columbia, Colorado, Missouri, Arkansas, Red and Rio Grande Rivers; and Louisiana and Texas streams flowing into the Gulf of Mexico. Major General Jackson Graham (Ret.), formerly of the Corps of Engineers, the agency working with the Bureau of Reclamation on the study, asks, "Must we always try to bring water to people, no matter where and in what inhospitable regions they may choose to wander? Is a man entitled to buy up, settle, or promote a chunk of desert and then demand that his government bring water to him from the general direction of the North Pole?"

Bill to give Interior control over thermal pollution

Rep. John Dingell, D-Mich., has introduced a bill that will allow the Secretary of the Interior to control the amount of thermal discharge in interstate or navigable waters. The bill would require federal agencies issuing licenses for any project that might result in a discharge of heated effluents to first obtain from the Secretary of the Interior certification to the effect that the discharge would not reduce water quality below the applicable state and federal water quality standards. The Secretary of the Interior would grant the certification only after consulting with state water pollution control agencies and, in some cases, holding public hearings. The conditions outlined in the Interior Department's certification would then become a part of the provisions of the permit granted by the federal licensing agency. "The bill, referred to the Public Works Committee, is mainly aimed at nuclear fueled power plants. Right now, the Atomic Energy Commission, which licenses such plants for safety and radiation purposes, disclaims any control over thermal discharges," reports the Izaak Walton Magazine.

Livestock interests and conservationists watch Public Land Law Review Commission

The historic feud between cattlemen and sheepmen has been set aside as the two livestock interests join forces to ride herd on the Public Land Law Review Commission. The Commission, now engaged in an intensive study of the policies and programs of federal agencies administering the nearly 770 million acres of public land, is scheduled to submit its report to the President and Congress in June, 1970. According to the Wildlife Management Institute, both the National Wool Growers Association and the American National Cattlemen's Association, whose members hold permits to graze livestock on public lands, are asking, through their state affiliates, that members contribute five cents for each animal-unit-month of permitted use. The goal of the graz-

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Field camp near McMurdo Sound, Southern Victoria Land. Radian Glacier and Mt. Rucker (12,500 feet) are in the background.

Camping In Antarctica

by Wakefield Dort, Jr.

WITHIN THE SPACE of a bit more than one year I camped in the Idaho Primitive Area as geologist of the Sierra Club's Exploration and Reconnaissance Trip No. 1 and in Southern Victoria Land, Antarctica, as leader of a research project for the National Science Foundation's Office of Antarctic Programs. And a year ago I returned from a second, double field season in Antarctica, first with the Americans in Southern Victoria Land, then with the Japanese at the Prince Olav Coast on the opposite side of the continent. Camping in these

two wilderness areas presents extreme contrasts. Central Idaho is, in general, similar to other wild parts of the United States, and conditions are familiar to most Sierra Club members. But Antarctica is entirely different, so different as to make camping an almost completely new experience.

Southern Victoria Land is a narrow belt of rugged terrain on the western side of the Ross Sea, 2,400 miles south of New Zealand and 850 miles from the South Pole. Here and there, small piedmont glaciers separate bare land from a sea



Field camp in Olympus Range, Southern Victoria Land. Asgard Range is in the background, with glaciated valley now ice-free.

that is frozen ten months of the year. Inland, narrow ranges rise to elevations of 8,000 feet or more with hardly a foothill between coast and mountain peaks. The larger bulk of the magnificent Royal Society Range culminates in Mt. Lister at 13,200 feet. Beyond is the featureless ice plateau.

Here is an oasis of some 3,000 square miles on the edge of the vast icy desert of the Antarctic Continent, an oasis equivalent in size to three Rhode Islands on a continent almost twice the size of the United States. Much of this area is bare rock and rubble, free of ice and snow. Here are the largest of the famous "dry" valleys, recently vacated by formerly more extensive glaciers. And here is the favorite locale for field research in several scientific disciplines during the few weeks of the austral spring and summer.

This is a strange land on the fringe of the great antarctic ice cap, alien and deadly to those who neglect to respect its ways. Cold is the ever-present danger, a pervasive cold that varies only in its intensity. The summer sun is welcomed, almost worshipped. Its radiant heat warms dark rocks that thus become wonderful to sit on or lean against, and it melts a little snow or ice to provide the only source of water for drinking or cooking. When the sun is shining brightly, its heat on one's back causes a vigorous sense of well-being; a thick cloud cover brings despair.

Stronger winds bring snow. It may be old snow simply undergoing redistribution, or it may be new snow. No matter. Driven by a gale, it isn't soft, it doesn't float and dance, it doesn't tickle. It bites and digs and drives at one. And a



Preparing dinner of steak and rice on Coleman stove in field camp, Southern Victoria Land.

Field camp in Taylor Valley, Southern Victoria Land.



storm may go on and on for two, four, even six days with hardly a pause. It is for this possibility, even probability during much of the year, that the man in the field must be prepared.

There are no high-light trips here, no carefree excursions to valley floor or mountain slope with a sandwich in your pocket and a sweater around your waist. Clouds form quickly; storms rise suddenly. A whiteout may bring a fusing of land and sky that totally destroys all sense of direction, distance, angle of slope, and size of object. Man is left swimming in a bottomless, topless, dimensionless void from which there is no escape except by a thin thread of chance. So the hiker must be able to survive with what he carries along. He must always have with him a pack containing extra layers of wool or fur clothing, as well as emergency food. Water must be carried in a thermos or inside a warm inner pocket—an ordinary canteen soon contains only a lump of ice. And somewhere close by there must be a tent, sleeping bag, stove, and food enough to last for many days beyond the expected stay.

All of this kit is transported by helicopter (in the ice-free areas) or hauled on a sled or motor toboggan. So every item is selected with just as much care as are the contents of a single small knapsack on a trip in the High Sierra. There is no possibility of living off the land. The only plants are a few small lichens clinging tightly to rocks in rare, especially favorable locations. Animal life—seals, penguins, skuas—is confined to the sea and shoreline. Inland there is nothing. Nothing lives; nothing moves except the wind, snow, and sand, and a few ephemeral trickles of water that come into being in midsummer in direct sunlight for an hour or a day, then return to motionless ice once more.

Out in the field men live in tents. These serve not only as a place to sleep, but as a haven during storms. Setting up a tent is mechanically the same everywhere, though not uncommon wind velocities of 40 or more miles per hour necessitate both a search for some semblance of a sheltered site and placement of large rocks on tent base and pegs. In fact, it's pretty difficult to drive pegs into the solidly frozen ground at all. There is no need to fear swamping on a valley floor by heavy rain, but fierce downslope winds can be deadly as they moan off the inland ice cap.

Large tents being much too hard to hold down in a wind, or to heat, two-man mountain tents of various types are most commonly used. As a necessary accessory, an inner liner to help conserve heat replaces the mosquito netting of warmer zones. There being no fir boughs or bracken available, foam-rubber pads provide insulation from the frozen ground. An air mattress just won't do the job, and certainly, digging a hollow for one's hip in the inch or two of windblown sand or frost-riven rock that overlies the permafrost can lead only to misery and little rest.

Food and cooking gear can all be piled in a convenient commissary unit outside. There's little need to fear damage by heat; in fact, it is again the unending cold that causes problems. Anything packed in water or light syrup soon freezes solid, and a mighty long immersion in boiling water is required to melt even part of an icy can of, let's say, peaches or green beans.

A seasoned club member might well ask why dehydrated or freeze-dried food wasn't used, requiring only the easier melting of ice for water. The main answer is that these foods were not available in the antarctic supplies, all of which came

from regular Navy-issue rations. It must be remembered also that under these frigid conditions, it is not even possible to set out a pot of beans to reconstitute unless that pot is kept warm on a stove. And it would be unthinkable either to leave a stove untended in camp all day or to waste precious field time waiting for the water to do its work.

That general nuisance, the wind, also influences commissary operation. There being no trees, no sticks, no convenient places from which to hang a protective fly, stoves are set up in the lee of boxes or large rocks. But neither Coleman nor Primus stoves will operate effectively as wind velocities pass 20 and climb to 30 or 40 mph. The only recourse then is to retreat inside a tent—an operation that not only makes cooking difficult, but also requires maximum attention and care because the destruction of shelter by fire might well prove to be a fatal disaster. It is common sense to have an extra tent, or at the very least, extra wind-proof sleeping bags, set off at a safe distance.

There is, of course, no need to worry about possible visitations by hungry animals, no need to put everything in tins or build a Sierra bruin-baffle. But the complete absence of furred or feathered friends removes one of the important pleasures of wilderness camping: no birds singing beside the trail, no crickets lulling one to sleep, no squirrel reveille at dawn. And the absence of vegetation removes another outdoor pleasure. Deep breaths find none of the zestful aromas of spruce forest or sun-hot meadow, no flowers or spicy herbs, not even "mountain freshness." The air is sterile, odorless, blank. It supports life, but gives nothing to the spirit.

Also missing is the campfire that sweetens the night with pitchy flavors—or sends you off coughing and wiping your eyes—and brings mysterious oneness to a group even though all be quiet and thoughtful. Huddling with an after-dinner cup of rapidly cooling "hot" chocolate over a sputtering gasoline stove is simply not the same.

There are rewards, however, for the explorer who invades this land. The scenery is magnificent, the vistas almost unbelievably wide and long in the clear air. In fact, with absolutely no objects present that are of known dimensions and thus usable for scale reference, it is extraordinarily difficult to estimate size or distance. A small boulder on the neighboring hillside may turn out to be as big as a house and miles away. Thin lines of bas-relief etching on a weathered cliff of sedimentary rock are really ten feet high. The little sand-flat nestling below the cliffs of a cirque, or the level surface of a debris-strewn valley floor, may actually slope upwards at a gradient steep enough to make one puff beneath the load of a heavy pack.

Seen from high vantage points, sharply-cliffed peaks progress toward the limits of the visible world, often 50 or more

miles away. Some peaks glisten with sheaths of blue-white ice; others are bare and gaunt, dark brown or tan against the sky. Lower slopes, more subtly curved, show pastel inter-shadings of browns and grays overlaid with tones of blue or purple, forever changing as the sun travels completely around the sky. Glacier tongues reach out from the upper snowfields like shrouds spread on the rocks to dry. Cloud figures may billow and drift in fanciful patterns, often a not-to-be-ignored warning of impending storm. But there is no daily blending of a fiery sunset fading into star-sprinkled night; the sun merely dips a little toward the southern horizon while continuing its circle.

With the possible exception of the wind, the silence of the outside world is complete. It is all-pervasive, a seemingly tangible force that presses in on every side. In self defense, imagination soon begins to fill the void with fancied sounds of more familiar mountains. The squeak of a leather pack-strap becomes a bird's song; the rustle of clothing forms the sound of a distant stream. If a real trickle of water is found on a warm day, its soft splash is welcomed as a dear and long-sought friend that one lingers by, just listening and watching and dreaming of the rustling of leaves or scolding of a squirrel.

But here in Antarctica is the lure of discovery—discovery not only for one's self, but also for Man's knowledge of this planet Earth on which we and our ancestors have wandered for such a brief moment of time. Even near the "metropolis," the American base at McMurdo Sound, little is known in detail about the natural environment. In the dry-valley area, each day's travel, each new slope, each cirque or cliff, brings new observations, new thoughts, new discoveries. The challenge of learning and explaining is never exhausted. And so the scientist is impelled to return again and again, striving to achieve ultimate understanding.

Dr. Dort, a club member, is Associate Professor of Geology at the University of Kansas, in Lawrence. Photographs illustrating the article were taken by the author.



The author writes field notes at the crest of the Olympus Range, Southern Victoria Land. Asgard Range (6,500) feet is in the background.

Did Trapper Nelson Invent the Packframe?

by Eugene H. Walker

THE INVENTOR OF THE PACKFRAME was not Trapper Nelson but some forgotten man in Asia, whence came so many other inventions such as kites, gunpowder, rockets, well-drilling, rotary winnowing machines, paper money, and movable type. Is there an earlier picture of a packframe than this, which dates from the T'ang Dynasty, 618–907 A.D.? This rubbing from a carved stone in a temple at Ch'ang-an, the T'ang capital of China, shows the monk Hsuan-Tsang who died in 664 A.D.

The packframe must have been invented long before the T'ang Dynasty. Like the earliest fossil bird found so far in the rocks, complete with wings and feathers, the perfected packframe that Hsuan-Tsang carries tells of long previous stages of evolution. The packframe was probably developed long before the beginning of the Christian era by those who traveled under heavy burdens along paths up wild gorges and over snowy Asian mountain passes, where freight still moves on human backs.

The picture shows that the packframe had evolved to about its present state more than 1,300 years ago. As with the knife, another basic tool perfected long ago, designers have made no basic improvements; they have only tinkered with variations in form and materials. Weight for weight, the bamboo of Hsuan-Tsang's frame has almost the strength of the steel or aluminum that we use today. The picture seems to show that Hsuan-Tsang's sword belt also serves as a waist strap for his packframe—a refinement that modern outfitters improved upon, by widening and padding, only recently.

Look also at some of the useful features of Hsuan-Tsang's packframe that ours lack. The legs are long enough to keep the bottom of the pack out of the dirt when the bearer props his pack against a tree or rock. Consider how the forward overhang shelters the good monk from sun and rain and snow—and more important, how it puts the center of gravity of the load over his hips better than any frame that we can find in this year's catalogues.

Considering how functional Hsuan-Tsang's packframe is, we know that the curious object hanging from the bar on top must be something useful. Is it a fire holder, where a few lumps of charcoal glow in a nest of ashes, ready to kindle a fire when Hsuan-Tsang stops along the trail for tea? Is it a smudgepot to help disperse any flies that get past the whisk Hsuan-Tsang waves? Is it a lamp whose trembling flame lights Hsuan-Tsang's feet along paths made cool in the hours of darkness?



Hsuan-Tsang, traveler and scholar of the T'ang Dynasty. Reproduced from Peking, a Tale of Three Cities, by courtesy of the authors, Nigel Cameron and Brain Brake, and by Harper & Row, publishers.

Hsuan-Tsang is pictured returning to China with many scrolls, true copies of the Buddhist scriptures. To get them he made "one of the greatest journeys recorded in any literature," as Nigel Cameron and Brain Brake tell us in *Peking, a Tale of Three Cities*. Leaving Ch'ang-an in August of 629, and traveling mostly alone, Hsuan-Tsang crossed the deserts of central Asia, skirted the southern foot of the Tien Shan, climbed over the snowy Pamirs into the basin of the Oxus River, crossed over the Hindu Kush, and finally descended to the birthplace of Buddha in southern Nepal. After 16 years

of wandering from monastery to monastery in India, searching out and copying manuscripts, he returned to Ch'ang-an. There he spent the rest of his life translating these scriptures with their message of release from superstition, from guilt, and from overweening ambitions.

So Hsuan-Tsang's packframe bore to China some of the seeds that grew into T'ang poetry, which, more than the porcelain, the carvings in jade, or the splendid painting, set that dynasty apart forever as one of the towering peaks of civilization.

Book Reviews

TOUGH TRIP THROUGH PARADISE: 1878-1879. By Andrew Garcia, edited by Bennett H. Stein. Illustrated, 446 pages. Boston: Houghton Mifflin, 1967. \$6.95.

People with Sierra Club interests may well learn something from the first American outdoorsmen—Indians and mountain men who lived in the wilderness before "civilized" man brought school, church, and courthouse to the West. And this is the way it was. At 23, Andrew Garcia—"I was a woolly Texan from Spanish America"—ran the gamut of this Western wilderness experience, all the way to marrying (one at a time) three Indian women.

Garcia's trail through this most important year of his life leads west from the prairies in a watershed period of the 19th century. We meet army men and placer miners, horse thieves and hunter-trappers. Here are the Blackfeet, Pend d'Oreilles, Crows, and Crees. Here is "the sweet sun," the long grass and willow land near the Big Hole River, the terrifying grizzly. . . . All these were known by "bull-headed An-ta-lee [Garcia's Indian name] and the ornery In-who-lise away up there sometimes almost in the clouds."

In-who-lise is the heroine in Garcia's Montana paradise. A proud and sensuous-looking young woman in her photograph, this Nez Perce had gone with Chief Joseph on that disastrous final trek across the Northwest. She and Garcia met and married, frontier style, while he traded among the tribes of the Montana Territory. Two outstanding sections relate her life's story. Part Three, "Why Should I Talk of My People?" is her personal story interwoven with a retelling of the Nez Perce's last stand for freedom. Part Four, "The Trail Home to Lapwai," is the brave-tragic tale of Garcia and In-who-lise's attempt to return to her people, then on a reservation. After an adventurous passage through beautiful high country now called the Anaconda-Pintlar Wilderness Area, she met death at the hands of a marauding Blackfoot—and Garcia went on his sad way towards a tamer life, raising grapes and children and writing this book.

Full of contradictions as most mountain men are, Garcia was unschooled yet literate in the great tradition of natural storytellers. Though this is an edited work, the real man comes through: dangerously impetuous, of confused con-

science (Catholic training warring with frontier ethics), enormously skilled in the crafts of mountain and plains, amorous, sober, and best of all for our purposes, a durable man with a sense of history. This is a very honest book, and one necessary to help counteract the false romancing about life in the early West. A superficial reading provides blood-and-guts excitement and a vicarious experience of life in the Montana Territory back in the 1870's. For the more philosophical reader, there is the once-again lesson of how we worked so very hard to destroy both our human (Indian) and natural resources.

What does the continual and direct confrontation with mountains and weather and wildlife make of man? Is man the better for living the primitive life, or as Roderick Nash has recently suggested, is the wilderness ethic dependent upon a highly sophisticated consciousness? *Tough Trip Through Paradise* is a vital document for the examination of these questions. The answer can provide an important part of the argument for wilderness preservation.

FRED FERTIG

VANCOUVER ISLAND'S WEST COAST. By George Nicholson. Illustrated, 356 pages. Vancouver, B. C.: George Nicholson, Pub., 1965. \$10.

Vancouver is the largest island off the west coast of North America. It lies north of the Straits of Juan de Fuca and runs northwesterly, parallel to the mainland of British Columbia, for nearly 300 miles. In places it is 60 miles wide. Geologically, it is a fold in the earth's crust, partially submerged and buckled upward into mountains that climax at over 7,000 feet. On the east, these mountains come down into broad plains; on the west, cleft by deep fjords and clothed with dark forests, they drop into the sea. Rocky islets stud the coast, where rains and fog are apt to linger.

For centuries, tribes of Northwest Indians—the Nootkas, the Kwakiutl, and the Coast Salish—found living space around the broad bays and along the beaches of Vancouver Island's west coast. They hunted deer in the forests and fished the bountiful waters of the Pacific, some brave ones

venturing out in cedar canoes to hunt the great whales. Theirs was a colorful culture, built around an intricate system of rank and cast. They were weavers of baskets, carvers of totems, and sometimes trappers, traders, and warriors. Living much to themselves, they were content with their world.

That world lay in the path of 18th century explorers searching for the fabled Northwest Passage. Juan Perez, Spanish captain of the *Santiago*, was the first to find it. On a windy day in 1774, he dropped anchor about 100 miles north of Juan de Fuca Strait off a point he named Estevan in honor of his second lieutenant. His ship needed water, so his men lowered boats and warily rowed shoreward. Equally wary, Indians paddled to meet them. There was a taut moment, then someone smiled and the trading of furs and trinkets began. But the wind stiffened and the *Santiago* began to drag anchor. The Spaniards sailed off without water and the Indians returned to shore, puzzled by the strangers and innocent of what their coming meant.

Had they known, they might not have greeted Captain James Cook so warmly when he stepped ashore at Nootka four years later. (Because of their welcome, he named the place he landed Friendly Cove.) It must have given Cook a turn to find Indians with Spanish coins and trinkets, but resolutely overlooking this, he planted the Union Jack and claimed the coast for his majesty George III.

Cook stayed a month, then sailed on to his death in Hawaii at the hands of not-so-friendly natives. It remained for a member of his crew, George Vancouver, to return a few

years later to chart the island and leave it his name. Trappers and traders followed, then the Hudson's Bay Company, pioneers, sailors, miners, loggers, fishermen, and finally, industrialists, developers, and tourists. The world of the Indians was utterly changed and lost to them forever—their ways, their gods, and their land.

George Nicholson offers a kaleidoscopic account of this history in his book. A native New Zealander, Nicholson has lived on Vancouver's west coast since 1910 and has made it very much his own. He has sailed every cove and inlet, dropped anchor off Estevan Point, and stepped ashore at Friendly Cove. A local booster with a strong sense of history, he has obviously kept a notebook through the years and jotted down whatever interested him. Out of this has come a book that contains a great deal of material, presented informally, often in notebook style, without editing or organization. One reads of Juan Perez in one paragraph and of a World War II incident in the next. There is much data on local shipwrecks—Nicholson is a shipwreck buff—and considerable emphasis on all things marine.

There are 91 brief essays on everything from "A Woodpecker in a Porthole" to "The Story of Milady's Seal-skin Coat." If it adds up to a hodge-podge, it is a curiously charming and valuable one. For anyone who cares to dig and organize, there is source material here that would be hard to find elsewhere.

Although he writes with sympathy and some sensitivity about wildlife on Vancouver Island, Nicholson is no conser-

Photo by Chase Ltd.



Mrs. Lyndon Johnson visits Sierra Club display at June convention of the American Booksellers Association in Washington, D.C. With the First Lady is Sales and Promotion Manager Jack Schanhaar, who reports that she was particularly interested in the club's forthcoming two-volume work on the Galapagos.

vationist. He echoes the local sentiment that pulpmills and large fisheries are unquestionably for the betterment of the community. One of his chapters is titled "All Men Are Brothers," but it is clear that he equates the Indian's brotherhood with his acceptance of the white man's ways.

The book should interest visitors to Vancouver, and it belongs in the library of anyone interested in the Northwest

and its history. Its brief chapters, often only a page or two long, make for pleasant interludes of reading. (The book is not meant to be read at one sitting.) Expect when you finish it, however, to feel a pang of sadness for the red men who paddled out so innocently to meet Perez, and for the fish and the forests and the land they thought were theirs.

PEGGY WAYBURN

Letters

MANAGEMENT OF THE U.S. PUBLIC LANDS

PAUL BROOKS' article "The Words We Work With" [*April SCB*] prompts me to offer the following definitions relating to public lands of the United States.

National Forest. Wild land owned by the Department of the Interior but administered by an agency of the Department of Agriculture, the U.S. Forest Service. These lands, comprising 181 million acres, are managed principally for commercial timber production and grazing under sustained yield. Important but secondary considerations are watershed protection, recreation, and wildlife. Mining, camping, hunting, and fishing are permitted. Homesites and group campsites are leased, and many improved campgrounds are maintained.

National Park. Wild land owned by the Department of the Interior and administered by an Interior agency, the National Park Service. Composed principally of land and water of exceptional scenic, historical, or recreational value. No logging, hunting, or mining is allowed. Basic policy is to preserve nature while providing areas for appreciation by visitors.

BLM land. Un-allocated public lands remaining after repeal of the homestead laws. Administered by the Bureau of Land Management of the Department of the Interior. Some lands are held for sustained yield timber production and grazing, in the manner of national forests; others are offered for sale. BLM lands comprise 800 million acres, mostly in Alaska. Some consideration is given to recreation, watershed, wildlife, etc.

O & C land. Forest lands taken back from the Oregon and California Railroad Grant (Southern Pacific Company). It is under the jurisdiction of the Bureau of Land Management and is managed like BLM land. There are about two million acres, checkerboarded with national forest lands.

Wildlife Refuge. Land owned by the Department of the Interior and under the jurisdiction of its Bureau of Sport Fisheries and Wildlife. Comprises about 28,500,000 acres managed as habitat for birds and animals.

Wilderness Area. Parts of national forests, national parks, or national wildlife refuges classified as wilderness by act of Congress. No motorized equipment or permanent structures are allowed and logging is not permitted. Wilderness within

national forests is open to mineral entry, hunting, fishing, and grazing, but of these, only fishing is permitted in wilderness areas within national parks.

Primitive Area. Land administered by the Forest Service and managed as wilderness under administrative decision made prior to the Wilderness Act of 1964. It is subject to possible future classification as wilderness by act of Congress under the terms of the Wilderness Act.

GORDON ROBINSON
Tiburon, Calif.

STORM KING: THE NEXT STEPS

FOR MYSELF and for the many people who care about Storm King and the Hudson Gorge, thank you for David Sive's article [*Natural Beauty and the Law, May SCB*]. I must hasten to point out one error: the photograph of Storm King should have been credited to Sam Vandivert, not to me.

As you are probably aware, we are expecting the Federal Power Commission's hearing examiner to hand down his recommendations to the full commission in a matter of weeks. After that, a brief will be submitted by the lawyers for both sides. Perhaps there will be additional hearings before the full FPC to submit new testimony, and then reply briefs. At present, we anticipate that the FPC's decision won't come down before December 1968 or January 1969. Thence to the courts, probably, no matter what the decision; Consolidated Edison cannot be spoken for, but the Scenic Hudson Preservation Conference and the Sierra Club are prepared to go to the Supreme Court if need be.

NANCY MATHEWS
New York, N. Y.

A DEFENSE OF THE BULLETIN

I WOULD LIKE to express my disagreement with the opinion put forward by William B. Thompson in the February issue. The essence of his letter is that the Bulletin is no longer interesting enough to read, and in fact is not read by most of the members whom he knows, because the great majority of the articles are about conservation problems and are repetitive in that these problems and the means of resolving them tend to be nothing but variations on a common theme. To revive reader interest, Mr. Thompson suggests that the format should reflect that of earlier years.

My reaction to Mr. Thompson's letter is that he and other members who find the Bulletin to be dull reading misinterpret its function, and perhaps, the function of the Sierra Club. As I see it, the club is an organization of people who realize the values of the natural world and who are determined to protect that world for the sake of both this and future generations. If the Bulletin is to be an appropriate mouthpiece for an organization with this outlook, then it must deal primarily with conservation problems. This is probably more true today than it was early in the century because of the rate at which wilderness is being destroyed. I look to each issue of the Bulletin as my major source of information about conservation problems other than those in my immediate area, and I believe that most concerned Sierra Club members do. I find little repetition in the specific problems conservationists are faced with; human avarice and insensitivity, coupled with ecological naivete, seem capable of appearing in a great number of different forms. However, I have no objection to the inclusion of descriptive articles in the Bulletin, and contrary to Mr. Thompson's opinion, they are there.

ROBERT POLLOCK
Boulder, Colo.

NOT A MOMENT TOO SOON

I HAVE NOTED the exchange of letters and the review [*March and May SCB*] covering *Moment in the Sun* and wish to place myself firmly on the side of the authors of the book. Their book is an important one, not cheerful but telling, gathering together new material and old accounts that need reiterating, proving in one place the urgent story of what man

has been doing to the land and what man needs to do instead. I hope it succeeds well and hope, if someone else doesn't do it first, that the Sierra Club and Ballantine team up on a paperback as soon as possible. I would like to see the paperback in every classroom that cannot afford the hardback. The results would be salutary.

If your reviewer still thinks what the Rienows have brought together has already been said enough, in the face of the tragic conservation losses imminent in this Congress, the likelihood of maimed national parks (if any) in the redwoods and the Cascades, the lack of any action on many other park and wilderness proposals, the accelerated metastases by freeway in California and elsewhere, the growing threat to the Bay the club grew up beside, and so on into the whole list of destructive forces at work because enough people aren't alert to them and how to stop them—if he still feels so cool about it all, then I'm sorry. I hope some other writers will team up and say things new and old in a language that will get through. There's isn't much time left.

I am grateful to the Rienows for letting me know a good many things I didn't in the face of having had to make my way through conservation mail for three decades now, most of them related to the Bulletin. What everybody has written on the subject in all that time is just beginning to scratch the surface of American thinking. I will estimate that there are more people born in the U.S. each week than there have been readers of all the conservation books put together. *Moment in the Sun* isn't a moment too soon.

DAVID BROWER
Berkeley, Calif.

Responding to the club's recent fund appeal, the College of San Mateo Regional Group of the Loma Prieta Chapter raised money by washing cars "and every means under the sun," donating their earnings to the tax-deductible Sierra Club Foundation. Receiving the Group's check for \$200 are the Foundation's President, Richard Leonard (left), and Sierra Club President Edgar Wayburn (right). Making the presentation are (l. to r.) Manny Giordano, James Koch, and James Absher.
Photo by John Flannery.



**Atomic power experiment
to create natural gas
reservoirs**

ing groups is a fund of \$500,000. The money will go toward analyzing the effect of the Commission's recommendations on the livestock permittee and his use of the range and then either promoting or opposing the legislation that will come before Congress as a result of the Commission report. Meanwhile, conservationists are at work too. The Natural Resources Council of America, of which the Sierra Club is a member, plans to obtain analyses by outside experts of the various reports which have been authorized by the Commission and which will form the basis for the Commission report in 1970. The conservationists' experts will study these reports with an eye to scope, technical integrity, and the nature and balance of the recommendations offered.

**Interior Department
to authorize two test
oil shale leases**

The Atomic Energy Commission and Columbia Gas Corporation have announced *Project Ketch*, a proposal calling for the explosion of an atomic device under Sprout State Forest in north central Pennsylvania. The plan, now in its initial stages, is an experiment to determine the feasibility of creating, with nuclear explosives, natural gas reservoirs near large demand centers.

Secretary of the Interior Stewart L. Udall has announced tentative plans for two test leases for development of federally-owned oil shale land in Colorado. "Oil shale with a content of at least 15 gallons per ton in the Green River formations of Colorado, Utah, and Wyoming may total as much as 1.8 trillion barrels of oil — more than 60 times the estimated proven natural petroleum in the United States," the Department of the Interior reports. Of the 11 million acres of land overlying these oil shale deposits, approximately 72 percent is federally owned. The value of the resource in place is small and will remain small until new technology has been developed to make oil shale utilization more economically attractive. "The government should alienate little of its holdings until improved technology is developed or shown to be available by bids of appropriate size," Udall recommended. The two proposed leases are being offered "to test the market." The leases will be made with the explicit understanding that they do not establish a precedent for future leasing and under such conditions that it will not be profitable to hold the land for speculative purposes.

**Land use recommendations
for Virgin Islands**

The Park Service has released a resource study of the American Virgin Islands which outlines several proposals concerning land use for three of the tropical islands, St. Thomas, St. Croix, and St. John. Because this group of islands is an increasing tourist attraction, the study proposes (1) acquiring the remaining undeveloped sand beaches on the three islands for public use, (2) retaining public ownership of the offshore islands and keys as nature preserves, and (3) making a complete inventory of the coral reef complex and identifying the best reefs for protection in a public park system.

**Publisher offers advice
to those who would enrich
themselves by exploiting
the nations open lands**

"America is on the verge of its greatest of all real estate booms — a giant boom in raw land — a boom so large it dwarfs anything that has gone before," proclaims Prentice-Hall. In anticipation of this boom in the making, Prentice-Hall has prepared a handbook entitled *Raw Land: How to Find, Finance, and Develop It*. The publishers promise this "vital handbook" will give its readers a head start on raw land profits. "It shows you where to look, what to look for, how to come up with land that puts more money in your

pocket. You get six tested angles that help you line up the most desirable land and rake in top profits from it." Other tips offered the reader include how to develop a subdivision and how to spot huge profit possibilities in land which may have one key feature such as a view or valuable timber. According to the publisher, raw land is the country's last great real estate frontier — "the alert investor's last great opportunity for the land to make him rich."

California's water plan a peril to her future

California's water plan is leading to widespread pollution and to the destruction of the state's resources, Frank M. Stead, former chief, California Division of Environmental Sanitation, reports in the summer issue of *Cry California*. The present California Water Plan has two basic and fundamental flaws, Stead points out. "It is, in reality, only half a system and it ruthlessly transforms the ecology of vast areas of the state. . . . The plan provides facilities to bring water into the San Joaquin and the Southern California coastal areas, but provides no parallel facilities to remove water, and these basins are devoid of natural rivers to perform the function of wastewater removal, without polluting the ground waters." Further, each type of water use — agricultural, domestic, and industrial — loads the water with additional chemicals. Unless these increments of chemicals are removed in some way, the chemical content of the surface and ground waters of the basin will increase until the water becomes unusable. According to Stead, "This phenomenon is already occurring in parts of Ventura and Orange counties where ground water is so highly mineralized it approaches the point of unusability for either agriculture or domestic use." Stead urges the development of a new California water plan and cautions that until such a plan is adopted the state should not embark on any new interbasin water development and transport programs.

Theodore Wilentz is new publications manager of the Sierra Club

Theodore Wilentz, manager of Brentano's Fifth Avenue, New York, bookstore and immediate past president of the American Booksellers Assn., became publications manager of the Sierra Club July 1. Wilentz's experience is not limited to bookselling. Seven years ago, in partnership with his brother, he founded Corinth Books which has since published 50 paperbacks, including a 21 volume set called the American Experience Series. The new publications manager will work out of the Sierra Club's New York office.

Garden Club award to Sierra Club

The Garden Club of America has awarded its Sarah Chapman Francis Medal to the Sierra Club for literary achievement in the publication of the Exhibit Format Series of books on natural history and conservation. In making the award to the Sierra Club publications program, the Garden Club cited the program "for the tremendous impetus to the cause of national conservation provided by these magnificent books."

Clair Tappaan Lodge open year 'round

Thought of by many Sierra Club members as first choice for ski trips and winter holidays, Clair Tappaan Lodge is open the year 'round as a pleasant and relaxed place for vacations and weekends. There are trails for hikes; nearby lakes and streams for swimming and fishing; riding stables are not far away; and Reno, Lake Tahoe, and other attractions are within an hour's drive. Summer rates are \$5 per day for adults (includes three meals) with lower rates for children. For information or to make reservations contact Manager, Clair Tappaan Lodge, Sierra Club, Box 36, Norden, Calif. 95724; the telephone number is 426-3632.

Washington Report _____ by W. Lloyd Tupling

HOUSE INTERIOR COMMITTEE Chairman Wayne Aspinall and Ranking Minority Member John Saylor, who joined forces to bring about the overwhelming victory in the House of the Land and Water Conservation Fund bill, have combined elements of their individual bills into commendable legislation for the establishment of a National Scenic Rivers System.

The bill, H.R. 8416, reflects the prime features of measures that Mr. Aspinall and Mr. Saylor had introduced earlier in the 90th Congress, including many improvements on a similar bill passed by the Senate last year. For instance, the Aspinall-Saylor bill bars the Federal Power Commission from licensing the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works "on or directly affecting any river" designated as a component of the system. Moreover, it forbids federal departments and agencies to recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such a river was designated.

The Aspinall-Saylor bill designates six well-known streams for inclusion in the initial National Scenic Rivers System and provides for the inclusion of others after studies and reports by the Secretaries of the Interior and of Agriculture. The first components are:

1. Middle Fork of the Clearwater in Idaho (from the town of Kooskia upstream to Lowell); the Lochsa (from its junction with the Selway upstream to Powell Ranger Station); the Selway (from Lowell upstream to its source).

2. Rio Grande in New Mexico (from the Colorado state line downstream to the crossing of state highway 66) and the lower four miles of the Red River.

3. Rogue River in Oregon (from the mouth of the Applegate River downstream to Lobster Creek Bridge).

4. St. Croix in Minnesota and Wisconsin (between the dam near Taylors Falls, Minn., and the dam near Gordin, Wis.) and its tributary, the Namekagon (from its confluence upstream to the dam near Trego, Wis.).

5. Middle Fork of the Salmon in Idaho (from its source to its confluence with the mainstem of the Salmon).

6. Wolf River in Wisconsin (from the Langlade-Menominee county line downstream to Keshena Falls).

The Allagash Wilderness Waterway in Maine can be added to the system upon application of the state's governor and approval by the Secretary of the Interior.

The House Interior Committee leaders also nominated 27 other rivers or major portions of them "for potential addition" to the system. These include the Bruneau (Ida.), Buf-

falo (Tenn.), Chattooga (N.C., S.C., Ga.), Clarion (Pa.), Cumberland (Tenn.), Delaware (Pa., N.Y.), Eleven Point (Mo.), Feather (Calif.), Flathead (Mont.), Gasconade (Mo.), Illinois (Ore.), Little Miami (Ohio), Missouri (Mont.), Moyie (Ida.), Niobrara (Neb.), Obed (Tenn.), Penobscot (Me.), Pere Marquette (Mich.), Pine Creek (Pa.), Priest (Ida.), Skagit (Wash.), Susquehanna (N.Y., Pa.), Suwannee (Ga., Fla.), and Upper Iowa (Iowa).

An important feature of the Aspinall-Saylor bill is that state legislatures can designate rivers for inclusion in the system if they are permanently managed as scenic rivers and are found by the Interior Secretary to meet the criteria for scenic rivers.

Aside from the immediate protection that the Aspinall-Saylor bill gives to specific free-flowing streams, their bill represents a landmark policy declaration. When enacted, it will establish a national policy that "certain selected rivers . . . shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit of present and future generations."

A nationwide system of trails, possibly covering 6,375 miles, is expected to emerge as a major conservation accomplishment of the 90th Congress. Although different versions of National Trails System legislation came from House and Senate committees, final adjustment of the bills by conference committees will no doubt provide another mode of protection for forest and mountain areas.

The report filed in the Senate by Interior Committee Chairman Henry Jackson calls for four categories of trails and designates four units in the initial system: the Appalachian Trail (Maine to Georgia), the Continental Divide Trail (Canadian border to southern boundary of Bridger National Forest in Wyoming), the Pacific Crest Trail (Canadian border to Mexico), and the Potomac Heritage Trail (from the source of the Potomac River to its mouth). Jackson's bill, S. 827, calls for additional trails in remaining scenic and unspoiled areas, especially in areas near to metropolitan concentrations.

The House bill reported by Rep. Roy A. Taylor, Chairman of the House National Parks Subcommittee, would initially authorize only the Appalachian Trail. However, Mr. Taylor's H.R. 4865 provides for the inclusion of additional trails after the Secretaries of the Interior and of Agriculture have conducted studies and made recommendations.