SIERRA CLUB BULLETIN



Primitive nature is the most interesting to me.

I take infinite pains to know all the phenomena of spring, for instance, thinking that I have here the entire poem, and then, to my chagrin, I learn that it is but an imperfect copy that I possess and have read, that my ancestors have torn out many of the first leaves and the grandest passages.

-HENRY DAVID THOREAU

Logging, Floods, and "Official" Watershed Research

Libraries are wonderful institutions. Buried in their dim archives are thousands of little-known publications. Sometimes there are those who would just as soon that certain of these remain buried. Such might seem to be the case regarding some of the published research of H. W. Anderson, Forest Service watershed scientist, employed by the Pacific Southwest Forest and Range Experiment Station at Berkeley. For the "official" position of the U.S. Forest Service Region Six (Washington and Oregon) has been that watershed research began here only in 1955 and that there has been insufficient time to draw any basic conclusions.

It therefore came as a real surprise to run across some technical papers by Anderson describing extensive watershed research in the region done between 1950 and 1952—and to note that some quite definite conclusions were reached. This project was part of the Forest Service Flood Prevention Survey of the Columbia River Basin conducted jointly by the Pacific Southwest and the Pacific Northwest Forest and Range Experiment Stations. By using stream flow measurement from the U.S. Geological Survey, many years of work were saved.

Thirty Years (Minimum) To Restore a Logged Watershed

In comparing the peak discharges of the logged Willamette River with the unlogged McKenzie in the same basin, it was found that the ratio of logged to unlogged watersheds increased by 30 per cent as logging progressed. Even after two large flood control reservoirs had been built, the difference was still 13 per cent. Nor were these increases due primarily to unsatisfactory reforestation. Even when a forest is fully stocked soon after logging, it has been found that it takes 30 years in the Willamette drainage for a new forest to reach its maximum effectiveness in preventing floods. In ten years the age effectiveness is but 30 per cent.

An equation was developed for averaging together all the various forest effects on floods. From this it was determined that clear cutting one square mile of forest in the area below the snowmelt line for a given storm will increase the flood peak 103 cu. ft. per second—an increase in "rainfall excess" on the cut area of 0.16 inches per hour. In one preliminary test the floods of a logged and unlogged watershed near Portland were compared. The floods became progressively higher in the logged watershed—56 per cent by the time 11 per cent of it was cut.

Another conclusion of interest was that the highest contributor of floods was the zone between 2,000 and 4,000 feet (for the Willamette above Salem). This medium zone has a flood potential almost double that of the lower zone and three times that of the 6,700-foot level.

Suspended sediment studies were also made, using data previously obtained by the Corps of Engineers, the Forest Service and the Bureau of Reclamation. It was found that the most unstable soils (Recent and Eocene volcanics) were 11 times as erosible as the most stable soils (developed on alluvium). It was concluded

COVER: An "Island in Time"—the Point Reyes Peninsula, north of San Francisco, California, where the Pacific rolls in as it always has, against an unspoiled shoreline. After inspecting the region recently, Secretary of the Interior Stewart L. Udall called it "the most magnificent remaining seashore wilderness in the United States." Although hearings have been held on proposals to establish a national seashore here (see Bulletin Board, March SCB) subdividers are continuing to destroy its natural values. Only prompt action by all Americans—exercising their constitutional right to express their viewpoint on these matters—will save Point Reyes. Wilderness Card No. 32. Photo by Philip Faulconer.

that if full utilization of the forest were to be attained (on a 70-year cutting rotation for Western Oregon), then the suspended sediment carried by streams would be expected to increase three times, assuming present (1953) methods of logging.

Is Region Six Ignoring the Anderson Studios?

Surely these various conclusions are of real significance. Why, one may ask, does Region Six totally ignore these earlier studies, and even suggest that logging as practiced on federal lands produces no appreciable increase in runoff? If Anderson's research was ill conceived, his conclusions of questionable validity, he and some others do not think so. His techniques and findings have been published as late as 1959—most recently in Belgium! In recent years, as Snow Research Leader, Anderson has been conducting research in the Sierra to determine how water yields can be increased by certain types of timber cutting in areas where water shortages are more of a problem than floods. Anderson's co-worker in the Western Oregon research, Robert L. Hobba, is now Hydrologist, Division of Flood Prevention and River Basin Planning, Forest Service, Washington, D.C.

One wonders what Anderson's techniques applied to watersheds in the North Cascades would reveal. Especially appropriate would be watershed studies in King County, where citizens recently voted to tax themselves \$5,000,000 merely to plan flood control measures. National forest payments to King County in fiscal 1958 were \$119,000, mostly from timber sales. At this rate it would take 45 years to reimburse the county for flood control planning, to say nothing of the immense cost of the construction itself.

True, we have always had floods. But their severity is believed to be increasing. A dairy equipment salesman has found it to be the consensus of lowland farmers in the area that floods are definitely increasing, for dikes which have been adequate for years now need to be raised. Maybe stripping our scenic mountainsides to keep a few sawmills in business is not such a good idea after all.

-John F. Warth, North Cascades Conservation Council News

Adventure at the Annual Dinner, May 6

Willi Unsoeld, a member of the 1960 expedition to the Karakoram Himalayas, will speak on "Success at Masherbrum" and show slides of the climb at this year's Annual Dinner.

The dinner will be at Goodman's Jack London Hall in Oakland on Saturday, May 6 (reception at 6 P.M., dinner at 8:30 P.M.). Tickets are \$4.75 and reservations should be made now at the club office; no tickets will be sold at the door.

Prints from the Cedric Wright collection will be on exhibit. Many of the pictures need identification, and background information will be collected from those who recognize locations and can supply facts and dates.

Election results: William O. Douglas, Associate Justice of the Supreme Court, and Jules Eichorn, Atherton, Calif., became new directors of the Sierra Club at the annual election on April 8. The three incumbent candidates, Richard M. Leonard, Clifford V. Heimbucher, and Pauline A. Dyer, were re-elected for 3-year terms.

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

August Frugé, Chairman, Publications Committee
David R. Brower, Executive Director Bruce Kilgore, Editor

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Sierra Club Bulletin

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

Board Approves Largest Budget in Club's History

MEETING January 21 in San Francisco's Mark Hopkins Hotel, the Sierra Club's Board of Directors acted on many wilderness and recreation matters and voted approval of a budget to meet the club's expanding needs. Among other actions, the Board:

- approved the Forest Service reclassification of the Selway-Bitterroot Primitive Area, but strongly urged the retention in wilderness status of the greater part of the more than half a million acres proposed for elimination from such classification. (See page 7 of the January 1961 SCB.)
- supported the position of the Wilderness Society* and urged special effort be made to preserve the superb wilderness values of the natural streams of the reclassified area.

Moving from the only national forest matter discussed at this Board meeting to a local forest problem, the Directors opposed the currently proposed New York State constitutional amendment which would provide for the development of ski and resort facilities by lease on Hunter Mountain in the Catskill section of the state Forest Preserve. If any such developments are made at Hunter Mountain, the Directors favor construction, maintenance, and operation solely by the New York State Conservation Department.

National park matters occupied a large share of the meeting, although the principal topic for consideration, wildlife management in park areas, resulted in deferment until the May meeting. Other park actions were

- expression of Board opinion that appropriate portions of Great Salt Lake should be preserved in the national interest under federal jurisdiction,
- reaffirmation of Board action of September 1960 relating to protection of Rainbow Bridge National Monument,
- urging congressional appropriations to acquire 10,000 acres of inholdings in Joshua Tree National Monument,
 - asking the Park Service to construct a

* See The Living Wilderness, Autumn-Winter, 1960-61.

hiker's trail (for foot travel only) up Tenaya Canyon in Yosemite.

Following up the September recommendations requesting an interagency study of the Mendocino coastlands and subsequent discussions with Ben Glading, California Department of Fish and Game, and Chester Hart, California Wildlife Management Board, the Directors went on record as stating that the Kings Peak area in Humboldt and Mendocino counties is highly deserving of preservation. The Bureau of Land Management was commended for its action in continuing the status quo of the region as was the Coöperative Survey Committee for initiating studies looking toward preservation. Further studies were urged to determine the most appropriate type of preservation encompassing natural scenic values as well as values to sportsmen.

A recent California state document was briefly reviewed and it was noted that the Second Five-Year Master Plan of the Division of Beaches and Parks recognizes a need for early acquisition of additional land beyond the rounding out of existing areas, but that such additional acquisitions are not included in the final recommendations. The Directors commended the Division and the

We can no longer afford merely to knock the tail feathers out of our problems as they pass us by. Delay or inaction should be intentional, not caused by neglect or entrenched bureaucratic habit. As the pace of events accelerates, cumbersome machinery must be simplified. Responsibilities are being assigned to known individuals, in specified Departments, rather than to faceless committees. Ideas are being given a chance to grow into policy, not strangled at birth by procedural entanglements. Coördination becomes a responsibility of the action agency, not a device to spread hidden vetoes around the city of Washington.

> -Secretary of State Dean Rusk Charter Day Address University of California March 20, 1961

State Park Commision on the plan, making clear that immediate steps should be taken to include important areas in the park system before rapidly rising land prices prohibit procurement of such lands.

One other California problem received attention. On January 9, 1961, Senator Fred S. Farr (Monterey County) introduced Senate Bill No. 61, providing for permissive legislation authorizing local governmental bodies to establish "scenic reserves." Upon recommendation of the Conservation Committee, the Board recorded itself in support of the principle embodied in this proposal.

The Board authorized a committee of Elmer Aldrich (chairman), George Marshall, and Lewis Clark to define generally the word "recreation," and to develop a classification of types of recreation, using terms which will serve as a basis to interpret uses of land being recommended by the club. There was agreement, too, that the proposed classification should bracket the entire recreation field from use of undeveloped wilderness to use of completely-developed, high-density recreation areas.

With the club operating on a calendar-year basis, January is always budget time. Treasurer Clifford Heimbucher summarized the record for 1960 and presented a 1961 "working" budget of \$356,000—by far the largest in club history—much of it in connection with the extensive publications program. Club outing and lodge operations will include an additional \$180,000 for 1961 according to budget estimates.

George L. Collins, who retired from his position as Chief of the Division of Recreation Planning, Region 4, National Park Service, after thirty-three years' service, was elected an honorary life member of the club.

The Board noted with deep regret the deaths of David Simons, a young Oregonian who did so much in focusing public attention on preservation of the Cascades; Raymond T. Zillmer, who sparked the drive for an Ice Age National Monument in Wisconsin; and Arthur E. Connick, one of the prime movers in saving coast redwoods.

HOLWAY R. JONES Associate Secretary



Hawaii needs a state park system to help preserve

The Life of the Land

By Walter S. Horchler

"He aupuni palapala ko'u; Aia i ka lani ke akua; O ke kanaka pono ola ko'u kanaka, Ua mau ke ea o ka aina i ka pono."

"My kingdom is a kingdom of knowledge; Its god is in heaven; The righteous man is my man. The life of the land is perpetuated by righteousness."

HEN KING KAMEHAMEHA III pronounced these words at his installation as ruler of the Sandwich Islands in 1843, he could have hardly foreseen the tremendous changes which were to bring economic revolution and commercial exploitation of unbelievable proportions to his island paradise in little over a hundred years. Today this motto still stands on the official seal of the Fiftieth State, and the promotion of the million-dollar resort industry has done an outstanding job of perpetuating an elusive

picture in the minds of millions of a vanishing way of life, which still sparkles from advertising posters and picture postcards.

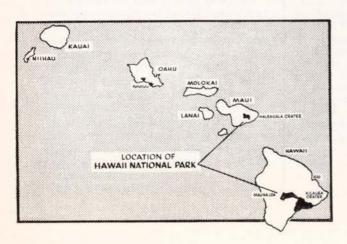
The land of Aloha teems with prosperity, the like of which it has never seen before; concrete towers mushroom out of taro patches, blacktop highways creep steadily over the green hills like gigantic spiderwebs and tourist limousines, packed to the brim, speed across the islands.

Is this the "life of the land," which the righteous monarch had in mind? Is it the life of the land which more than a quarter-million visitors come to see? Is it our unavoidable prospect to see the last vestiges of the blue-green slopes disappear under subdivisions, or the swallowing-up of the emerald beaches by continuous lines of hotel

Attempts to save "Old Hawaii" have been made in many forms and at various times, ever since the turn of the century, when the Islands became the Territory of Uncle Sam. In the forefront of these efforts have been the Outdoor Circle, founded in 1911, whose main goal is the preservation of the island's beauty, the Hawaiian Historical Society, and the many civic organizations with mainly Hawaiian membership, who are still predominantly concerned with the protection and perpetuation of Hawaiian lore and customs.

All these sincere endeavors have not been able to forestall a continually faster disintegration of the socio-cultural values and scenic-esthetic qualities of the land, which more and more must be visually superimposed on the actual vista presented to the paying customer of today. Must we accept as inescapable progress that every scenic viewpoint, if turned into dollars, will raise Hawaii's economy? Is it too late, after 150 vears of indoctrination in the value of this dollar, to do some more missionary work with ideals, which are just as much a part of the American way of life? Is it too late to foster understanding and appreciation for the preservation of the land?

Hawaii stands at the crossroads today! It can scuttle all the impractical ideas, which promote the setting aside of the fabulous and dramatic palis (cliffs) and beaches, its historic shrines, which overlook its mystic gorges, and it can give an unparalleled commercial exploitation the run of the country. These interests have not been idle, but privately or officially have already earmarked almost every accessible sandbeach for resort projects, and bulldozers are cutting into the red earth at every turn of the road. So-called tourist promotion is planning cable cars to



Our fiftieth state, 2000 miles west of San Francisco, has some of the finest scenic and historical resources in the world. Opaekaa Falls (above) on Kauai is shown in the shadow of Mount Waialeale—the wettest spot on earth. A highrise resort is being considered here—unless the region is acquired as a state park soon.

the top of Diamond Head and chairlifts leading up gorges for close views of majestic waterfalls.

Yet there is still time to decide that preservation and wise conservation of Hawaii's superlative scenic and recreational resources is equal partner in maintaining the Islands as the Paradise of the Pacific. Wilderness areas of magnificent quality are at stake, which in their geological and topographical aspects are rarely equalled anywhere in America and where flora and fauna constitute an important outdoor laboratory. Other extremely significant areas of historic as well as scenic interest are hard pressed by encroachment and need immediate protection.

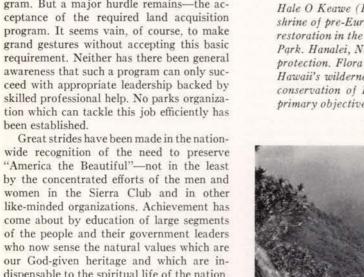
A blueprint is at hand in a comprehensive report* by the new State Planning Office, setting forth the "musts" in scenic and historic values which should be protected and saved for the benefit of all. It indicates the procedures which alone can bring about an effective program, by giving a formula for a state park system patterned after national park system standards.

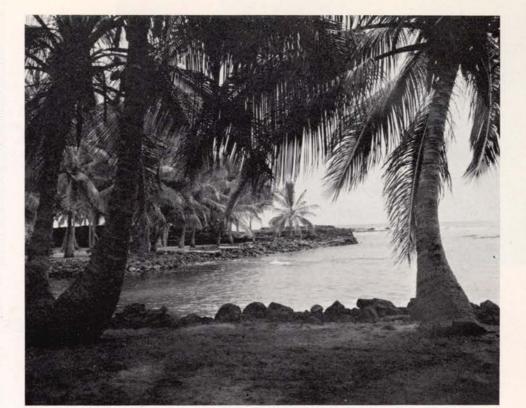
The broad aims of this plan have been welcomed warmly by civic groups and leading citizens, and the administration and legislature have professed support for the program. But a major hurdle remains-the acbeen established.

Great strides have been made in the nationdispensable to the spiritual life of the nation. These treasures can never be measured in monetary terms.

Are the scenic glories of the Fiftieth State worth the concern of all of us? Many think so; for they are priceless natural assets of the nation just like the Sierra, the Cascades and the Rockies. Hawaii needs our help today, to awaken the spirit of true conservation, to lift its sights to the irreplacable treasures of its matchless scenery.

A new missionary goal of outstanding caliber for us in the Sierra Club: we all have a stake in Hawaii to be sure that, "The life of the land is perpetuated by righteousness." That is the order of the day. Aloha Hawaii!

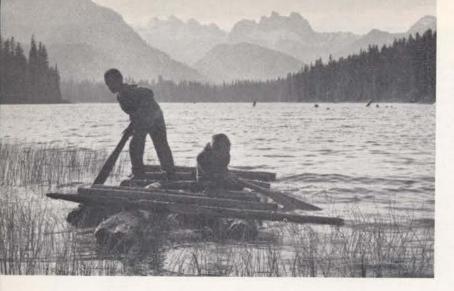




Hale O Keawe (House of Keawe), Heiau at Honaunau, Hawaii, is the only religious shrine of pre-European Hawaii and will receive federal park protection and authentic restoration in the long-awaited development of the City of Refuge National Historical Park. Hanalei, Napali (below) is an example of the coastal areas needing state park protection. Flora and fauna constitute an important outdoor laboratory in many of Hawaii's wilderness regions. There is still time to decide that preservation and wise conservation of Hawaii's superlative scenic and recreational resources should be a primary objective in the new state's immediate and long-range plans.



^{*} See page 10.



Paddling our raft to the trailless south shore of Cooper Lake in the Cascades of Washington. The peaks are Lemah (center), Chimney Rock to the right of that, and Summit Chief to extreme right. Our food and gear were packed in from Salmon La Sac by Walter Johnson.



Wilderness is for Families, Too!

Text and photographs by John Warth

 $\mathbf{Y}^{ ext{ou pon't}}$ have to take a vacation from wilderness vacations during those wonderful years when your children are young. This was the belief of the six families from Washington, California and Ohio who attended the 1960 Cooper Lake Wilderness Threshold Camp. They found that this type of outing ideally met their family needs. Thanks to careful planning by the Outing Committee and co-leaders Margaret and Joe Miller, everything went smoothly. First of all, a suitable base camp site had to be selected, and that wasn't easy. Requirements were far more rigid than for a High Trip, for instance, which caters principally to adults and older children. Moreover, suitable sites for family wilderness outings are becoming scarcer as access roads are being extended up nearly every forested valley.

Cooper Lake, on the east slope of the Washington Cascades about five miles outside the Alpine Lakes Limited Area, has so far escaped logging and road building. It met all requirements perfectly: accessible yet providing true wilderness, low elevation for warm nights, virgin forest for shelter and setting, freedom from hazards such as deep or swift water, opportunity for interesting activities, and above all—scenery.

At a cost of only 80 cents per person per day, food and personal gear were packed in by horse from the Salmon La Sac Resort. The hike of 4½ miles was easy with nothing to carry but a light pack. It did take Katie Goldsworthy six hours—but she was only three and youngest of the group. Not that she was especially slow. It was just that there were so many fascinating distractions along the trail—huckleberries, for instance.

Among the selling points on the site were the numerous possibilities for hikes, climbs, camera hunts for goats, and float trips down the river. As it turned out, there were so many interesting things to do right around the lake itself that these other opportunities were only partially utilized.

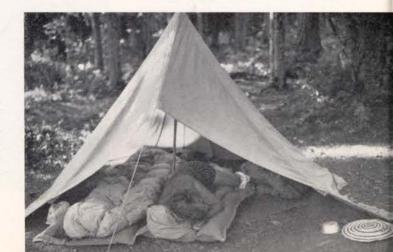
For one thing, Cooper Lake is so situated that the spectacular glacier-patched crags along the Crest are all visible from the water. The changes in the scene as day progressed, and under different kinds of weather, were fascinating to watch. Many were the times we paddled our raft across the Narrows to the trailless south shore with its sweeping view of mountains and forested hills. This raft had been built by Boy Scouts, who left just as our group arrived. They had even built a rustic dock for landing in the shallow water.

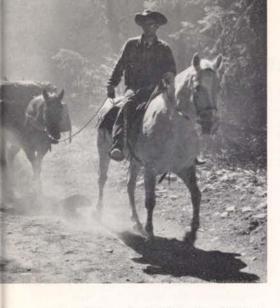
The shallow lake below our camp would have been ideal for children except for the danger of stepping on glass and cans tossed in by thoughtless campers. The water was warm, and farther out there was a mudanchored log protruding from the lake which made a dandy diving board.

But it wasn't all play. When the group arrived in camp it was rather a mess. So a rake of sticks was constructed by Pat Goldsworthy, to the great interest of the kiddies—and parents too. This started a wave of woodcraftsmanship resulting in such ingenious inventions as a waterwheel-driven stamp mill for the creek. But the real masterpiece was the catamaran which Joe Miller whittled



Stephan Barr adjusts the waterwheels in the creek, while Grandmother Kitty Lynch takes a siesta in her six-sided English tent.





Co-leader Joe Miller puts the finishing touches on "Bora Bora"; Nancy Marx works on her boat with a wooden knife, while John Forester looks on. "Rudy" (the dachshund) relaxes by the fire.



out and christened the "Bora Bora." What a picture of old-fashioned contentment: the intent woodcarver sitting by the fire, a dachshund sleeping at his master's feet, a group of admirers crowding close by with eager young faces!

Margaret Miller, a teacher, also provided worthwhile entertainment merely by pursuing her favorite hobby-collecting biological specimens. Soon we had many collectors, and a museum log upon which were displayed flowers, old nests, rocks, and the like. The prize was the complete beaver skeleton which Pat Goldsworthy spied on the lake bottom while taking a bath in a secluded bay. Each specimen was duly labeled by tenyear-old Lyn Bidwell. It is to be noted that all of these group activities were entirely spontaneous-so different from the highly organized crafts and nature study of the typical youth camp, in which competition is too often the chief impetus. Moreover, the wilderness environment stimulated resourcefulness and gave purpose to what might otherwise have seemed like "busy work."

Camp chores were so simplified by careful planning, the work so equitably divided, that even adults could devote much time to hobbies. Molly Barr painted water colors while her doctor husband Jim cast for trout. Julie Marx, mother of four, found time to practice classics on her recorder.

The big event each day was the evening campfire. With so much free time, it is not surprising that some rather elaborate preparations were made—all informal, of course. There were skits, singing games, recorder solos and songs galore. The biggest sensation was probably the continued story by Kitty Lynch, who was there with her husband and two grandchildren. The story, its telling enhanced by a charming British accent, enthralled children and parents alike. It was all about an affable pet dragon, George Appleton, who had an enormous appetite for ice cream cones, etc. We just couldn't wait to hear what George would do in the next episode, which his creator would spend the next 24 hours thinking up.

For almost a week the 25 members of the Wilderness Threshold outing lived a kind of charmed existence in a world seemingly far removed from civilization. We had the lake virtually to ourselves, for few hikers come up to Cooper Lake except on week ends. Although we were less than five miles from the nearest road, there were no sounds of motor boats, chain saws or trucks, no radios or TV. The only music was made on location: the song of birds, the wind in the forest, the beating of wings as a pair of ducks commuted daily to the far end of the lake.

It wasn't until the last day, a Saturday, that the spell was broken—with a rude jolt! I recall lying in my bag so peacefully, when suddenly I began to hear a motor vehicle approaching. The "put-put" got louder and louder and louder! It wasn't a dream at all. A couple of feet from my tent two motor scooters whizzed by. One of our party

jumped up in time to stop these 6 A.M. intruders. "It was that kind of thing we came up here to get away from," he shouted.

It is safe to say that all left Cooper Lake with two firm convictions. The first was that many families are missing a tremendous experience that could be theirs if they only knew how pleasant and inexpensive living in the wilderness can be. The second was that the opportunities for such familystrengthening experiences are disappearing at an alarming rate. Much dedicated wilderness is beautiful alpine country sometimes reached only by rather rough, steep trails. The lowland valleys, with their dense merchantable forests, are seldom considered predominantly of wilderness value-therefore roads, logging destruction, noise and conflict must prevail. Hence the efforts of organizations like the Sierra Club to save unspoiled some lowland wilderness areas where possible, and in any case to encourage their use and enjoyment while still intact.

[See the February SCB for descriptions of this year's eight Wilderness Threshold camps.]



Molly Barr finds time to paint in the near-wilderness atmosphere of the Threshold camp. Even chores such as fetching water are fun.



Most visitors to the Big Basin region think the falls—Golden (above) and Silver (below)—are a part of Big Basin State Park and hence protected from the logging damage which is even now closing in on them. They are not in the park, but rather in the T-shaped black area shown on the map below—an area owned and now being logged by the Big Creek Timber Company. Photos by Herbert & Holden, San Jose.



Public Apathy May Fell Big Basin Redwoods

A STAND OF VIRGIN redwood is now being logged on land which the state plans to purchase to join properties in California's first state park—Big Basin. Unless a flood of protest letters are directed immediately to Governor Edmund G. Brown asking him to use his executive powers to save these trees for public park uses, the logging will spread through 520 acres of scenic woodlands in the next few months.

The State legislature in 1956 appropriated \$500,000 for the purchase of this property—with trees—for addition to the Big Basin park. But the land was bought, instead, by the Big Creek Timber Company in October 1959 after the State Division of Beaches and Parks dropped negotiations to buy 836 acres from Ernest Locatelli for \$640,000.

Last spring, Bud McCrary, a partner in the Big Creek Timber Company, said, "We're not interested in selling, especially at the \$500,000 price." At the same time, Charles de Turk, chief of the State Division of Beaches and Parks, was quoted by the San Francisco Examiner as saying, "If we can't reach agreement on the sale, we have the power of condemnation, and we will use it."

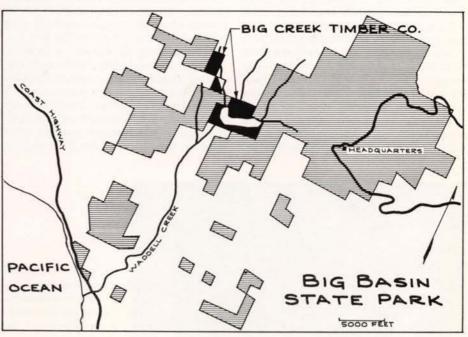
What has happened since that time? When conservationists recently came up with a proposal to provide the necessary funds for purchase, they were told by a Division of Beaches and Parks spokesman that even money wouldn't help.

The T-shaped area in question (see map) would join the eastern and western sections of the Park. It includes the beautiful cataracts of Berry Creek Falls, Golden Falls,

and Silver Falls—features which make Big Basin unique among redwood parks; it also includes an estimated 30 million board feet of redwood and Douglas fir.

Most visitors following the Sunset Trail assume that this little piece of near-wilderness is a part of the Park; State Park signs name the falls and mark the trail junctions. Golden Falls is remarkable for the shining color of the rounded rock over which the water tumbles. Then come the Cascades, amidst large ferns and moss-covered boulders. Farther downstream, Silver Falls drops precipitously for nearly forty feet, with clusters of five-finger ferns hanging from the moist, steep cliffs alongside. Finally, the shimmering cataract of Berry Creek Falls trickles down the entire face of a seventyfive foot cliff, dropping from one finger of moss to another. The walk downstream is like passing through a small section of the rain forest of Olympic National Park.

But the area is *not* in the Park, and the entire watershed lies in danger of ruin from logging operations upstream. Although statements have been made that the Big Creek Timber Company is willing to protect the attractive natural features of the region and will do no further cutting along the streams and "throughout the well-known and commonly visited portions of the area," already the slash and stumps are visible a few hundred feet up the bank from the trail. What will become of the watershed when more of it is logged off? Where will be the deep rich humus to soak up the rain and then release it slowly over a long period of time?



Below, a logging road has been cut all along Waddell Creek. At the mouth of the creek, on land which the Division of Beaches and Parks expects to acquire, campsites and picnic grounds will be installed, and the road will provide access to the falls. But what will people see as they approach? Tons of gravel, dirt and slash have already been pushed into the stream just below Berry Creek Falls, partially damming it, and only the onset of the rainy season saved the redwood trees still standing; their turn is next.

A prominent state spokesman has said that, "The present program of the Division of Beaches and Parks provides for the acquisition of the entire Berry Creek property, together with all the timber in a zone embracing the trails and the falls.... The more remote parts of the property will be logged under modern standards of forest practice. Under the circumstances, this was felt to be an acceptable compromise that would satisfy the great majority of park visitors."

Some may find this an "acceptable compromise," but many residents of the Big Basin region do not. A citizens' group made up of members from the Saratoga Historical Society, National Campers and Hikers Association, Sierra Club, and other organizations in the Santa Cruz Mountains and the San Jose area, has held numerous meetings about the situation. They feel that this land should not be merely a buffer area, but could be a significant and outstanding part of the Park, and should be kept intact. A delegation, headed by ex-State Senator Herbert C. Jones (who was responsible for various pieces of protective legislation which have benefited Big Basin), plans to talk with Governor Edmund G. Brown about stopping the logging activity in this area. Every person interested in the preservation of this unique woodland should write to the Governor expressing his views.—R. KURT MENNING.

Logs below the logging road which has been cut above Waddell Creek. Is this an appropriate setting for a state park?





Some 50 miles northwest of San Francisco, Bodega Bay looking north, Bodega Head in foreground. Photo by John LeBaron,

Struggle on the Seacoast

ON THE WIND-SWEPT rocks of Bodega Head—just north of Point Reyes—the battle still rages as to whether the area will be preserved for the benefit of all the people and for the needs of science or will become the home of a giant power plant. Not the Head alone, but the whole Bodega Bay area will be affected by the outcome of this issue.

Bodega Head with its rugged seascape, beautiful wildflowers, varied birdlife, unique geology, and rich archaeological finds should be a "must" addition to our state park system in any conservationist's book! Its value for marine biological studies (which have been underway for years)—due to the variety and abundance of tidal sea-life on its oceanside—would alone earmark it for preservation.

But in a larger sense, at Bodega Bay we have the opportunity not just to afford preservation, but, uniquely and clearly, to provide for both use and preservation of the natural advantages of the area. The bay is one of the chief natural assets of Sonoma County, providing commercial fishing ground and a basic industry for the region, containing one of the few good harbors on the northern California coast, and affording a fine beach for bathing and boating at Doran County Park. The potentialities of Bodega Bay for such uses have only been lightly tapped and yet could be fully realized while still preserving Bodega Head.

To the Pacific Gas and Electric Company, however, Bodega Head has appeared to be the ideal site for a huge electric power plant, eventually of 600,000 kilowatt capacity, to be either conventionally fired or nuclear. The company presently owns 160 acres on the tip of the promontory and is in the process

of condemning more property. P. G. & E. has occupied the site in spite of early plans of the California Division of Beaches and Parks for a park in the area and despite the strong protests of local citizens. The Sonoma County Board of Supervisors has favored the plant because of the tax advantage it affords and because they feel that it will encourage industry.

That such a power plant will adversely affect the natural uses of Bodega Bay, however, cannot be denied. The intake of large amounts of cooling water would be likely to endanger fish spawning in the harbor, while the effluent hot water may raise the ocean temperature sufficiently to radically alter the sea-life along the coast. Doran Park beach would be effectively ruined as a recreation area by three rows of unsightly power lines, and Bodega Head itself would sport either a 400-foot smoke-belching stack or a huge sunken reactor.

The real question is why must P.G. & E. be so insistent in using Bodega Head without proposing an alternative? The power plant can be relocated; the natural resources of the bay cannot. Nor is this the first good harbor or waterway in northern California which P.G. & E. has designated for itself. Humboldt Bay, Morro Bay, Elkhorn Slough, and Antioch have already felt the effects of industrial necessity, leaving only three or four such areas untouched.

Only the concerted pressure of public opinion can save Bodega Head. Ultimately we must face the question, will the natural resources of California's harbors and waterways be both used and preserved for the benefit of everyone, or will industrial desires take precedence?—Philip Flint.

Book Reviews

PEOPLE! CHALLENGE TO SURVIVAL, by William Vogt. William Sloane Associates, New York, 1960. 257 pages, illustrated with charts. References. Index. \$4.50.

William Vogt's new book is the last word on the population dilemma. His earlier volume, Road to Survival, (1948) concerned itself more specifically with what man, and his growing numbers, was doing to his resources. The current book, after twelve years of additional study and word-wide travel, present the related picture of what multiplying man is doing to himself and his own future.

Dr. Vogt brings to the task the background of a trained biologist, ecologist and internationally-recognized conservationist. It was inevitable that his interest should have tocused more and more sharply on the problems of human ecology, sociology and demography. Inevitably too, it is a rather grim book. But it is a book which every thinking person should read. Because its documentation is so thorough and its geographical coverage so great, it is impossible to escape the logic of its conclusions except by the ostrich-strategy of shutting one's eyes to the image of impending disaster. The degree to which this image has grown in the past twelve years provides a measure of its rate of approach. Its imminence raises the almost desperate conviction that while aroused intelligence could, of course, save us and our culture in the United States, it very likely will not do so. It is easier and more pleasant to

FLORA OF THE SANTA CRUZ MOUNTAINS OF CALIFORNIA

A Manual of the Vascular Plants

John Hunter Thomas

The area of the Santa Cruz Mountains covers almost 1,400 square miles and contains nearly 1,800 species, subspecies and varieties of ferns, conifers and flowering plants belonging to 167 families. This is the first comprehensive flora of this area. for use by serious beginners and trained botanists. Illustrated by line drawings and photographs. with distributional notes, keys, stratigraphic profile, commonname and taxonomic indexes, index of place names, glossary, and map. \$8.50

Order from your bookstore, please

Stanford University Press

enjoy our affluent style of living today while we have it—and let the future take care of itself. "After us the deluge."

While the situation is not a pleasant one—and the book is an accurate reflection of this—*People* still makes good reading. Though written by a scientist, it has neither the jargon of science, nor pedantic dullness. The English is trenchant, incisive, often sparkling and epigrammatic. Once you get started reading, the temptation to continue, in spite of dinner or other engagements, is very strong. Meanings and implications are never in doubt. Every conservationist will wish to read *People*.

It is good for us, preoccupied as we are in the active issues of conservation, to raise cur eyes and get the broader perspective. Nothing will be more certain, as we well know, than the destruction of our finest parks and forest wild areas if we do not find some way to curtail the multiplying needs of an ever-increasing population which ever-more-loudly demands full exploitation of all the fiber and forage grown on every acre of soil and all the minerals below. Even the sheer impact of loving feet can do great damage to wilderness, if there are enough feet. We know our efforts to preserve will be of no avail if the control of population is not soon achieved. Yet our work must continue to save wilderness for ourselves and future generations on the assumption that intelligence will be aroused to action in time or some miracle will avert the disaster.

One of the happier sections of the book—the chapter called "Success Story"—is devoted to the Scandinavian countries. It is a somewhat detailed survey of Scandinavian history and culture—perhaps the finest in the world today—developed in an environment so meager in resources and so limited in habitable land, that the small family became the normal pattern.

Until relatively recently Japan was able to endure its mounting population pressure by migration. Finally it went to war to secure a vast empire and living space for its excess people. After their crushing defeat, the Japanese people resolved that this should never happen again. Their birth rate has been cut in half in the last ten years, and is approaching that of a stable population. I am disappointed that Dr. Vogt did not devote more space and detail to this thrilling story, from which we in the United States—where our population doubles at about the same rate as that of India—can learn so much, if we choose to.

People will be read and appreciated by the intelligentsia—who are already aware of the problem, but who have been unable or unwilling to act. How to get the message to the masses in time, with sufficient conviction to lead to action, is the fundamental question. And in this regard, I often wonder how long the Sierra Club can afford to remain officially aloof from so vital a conservation issue.

HAROLD C. BRADLEY

A TERRITORIAL PARKS SYSTEM FOR HAWAII. Territorial Planning Office, 1959. 44 pages, illus.

This report presents the status of the park situation in what is now the fiftieth state, and lists existing and potential park areas throughout the Islands. Problems of land acquisition and the need for establishment of a statewide park system are outlined, and some specific developments recommended.

High Sierra Climber's Guide

Before Sierra Club members and their friends start their summer periods of mountain enjoyment, Hervey Voge and other authors of the Climber's Guide wish to remind them that corrections and additions for the guidebook are wanted. Such new material is most accurate if entered in a pocket notebook at the time of an ascent. Explorers of novel climbing routes or cross-country routes are invited to send descriptions of them to Hervey Voge, 2237 Carleton Street, Berkeley 4, immediately after the summer. Photographs or sketches showing details of routes are also desired.

Last Chance

A few more river trips down Glen Canyon this year may represent the last opportunity to run this part of the Colorado River before the dam is finished, the river becomes a lake, and the beauties of the canyon disappear beneath its waters. Sierra Club members are welcome on the seven-day trip, starting April 23, operated by Hatch River Expedition Co., Inc. (411 East Second North, Vernal, Utah), and on the several trips (starting April 30, June 11 and July 17) run by Georgie White (435 West Laconia Blvd., Los Angeles 61). Further information may be obtained from the trip operators.

Andrew Neuenburg

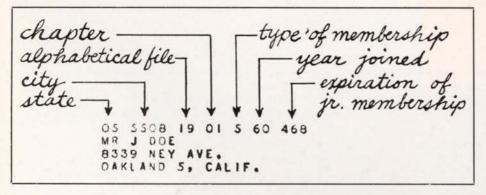
1878-1961

The many friends of Andrew and Violet Neuenburg were saddened to learn of Andrew's death on February 3. He had been ill for only two weeks.

The Neuenburgs were proud of their membership in the Sierra Club (he joined in 1911 and she in 1904), not only because they were most enthusiastic in their support of an organization working actively for conservation. but also because they felt especially indebted to the club since theirs was a Sierra Club High Trip romance, as they delighted in telling new friends and old. They were married on February 26, 1916, enjoying all through those years a happy, congenial companionship in a circle of friends who are members of the Sierra Club, and all of whom loved them as devotedly as they loved each other. In addition to a high regard for the Sierra Club. Andy Neuenburg had an enthusiastic admiration for Will Colby, who he felt had really made the club's position and influence widely effective in the early days.

Andy also had memberships in the California Academy of Sciences, and the San Francisco Zoölogical Society, among others; but his heart was with the Sierra Club and the great accomplishments it has made and is making in the cause of conservation.

MABEL EARLE



Decoding Those "Ghastly" Numbers

During 1960, the Executive Committee authorized the purchase of a Speedaumat, Model 2605, and a Graphotype, Model 6400, to take advantage of economies available to the club through the use of this equipment and to permit better and more rapid handling of membership records.

After five months of preparation, which included the reproduction of 15,000 new plates, sorting by cities, and notching for selective (not multiple) use, you were permitted your first look at the results on your January Bulletin. To some, these results resembled a ghastly impersonal combination of numerals and initials. After we have completely de-bugged our routines, the numerals will not appear on your mailing. They are, however, a necessary part of our work simplification and office procedures.

To help us de-bug the routine and to remove the mystery, we thought it advisable to explain the numerical coding system.

Postal regulations require that second-class mailing be sorted by geographical destination. This necessitated some means of coding so that plates could be filed in geographical order. We used the U.S. Post-Office Directory for this information. Thus:

05-California 5508-Oakland

Alphabetical Filing Aid-00-99

To facilitate filing of plates, membership record cards, dues notices, and other members'



records alphabetically, an alphabetical numerical breakdown was developed, using numbers 00-99. The figure 19 spans the alphabet from

Chapter codes are presently in use as follows:

00—General	09—Mother Lode
01-San Francisco Bay	10-Los Padres
02—Loma Prieta	11-Pacific Northwes
03—Redwood	12-Riverside
04—Angeles	13—Tehipite
05—San Diego	14—Toiyabe
06-Kern Kaweah	15-99-Reserved for
07—Great Lakes	future use
08—Atlantic	

Membership codes	0-9
0—Life member	4-Spouse membershi
1—Life members	5—Junior membershi
(both spouses	6—
life members)	7—
2—Life member's	8—Bulletin subscriber
spouse	9—Bulletin exchange
3-Regular members	ship subscriber

Year Joined

This 2-digit number represents the year application was accepted. Thus, a 1960 applicant would be identified by the number 60. If membership lapsed and was later renewed, the date used is the starting year of the current membership. For spouse memberships the earliest date that either spouse joined has been used. If you find that we have erred in your membership date, drop us a note and we will correct our mistake, as our records are incomplete on many dates prior to 1925.

Junior Member Expiration Date

In a manner similar to the above, this date represents the year a junior member attains his or her twenty-first birthday. This date is always preceded by the numeral 4 to signify that such birth date is reached prior to April 1 of the year indicated. Thus, 468 is shown in the sample.

Bulletin Subscribers

For Bulletin subscribers, the starting date is dropped and a 3- or 4-digit expiration date is substituted. Thus, 1160 would indicate expiration with the November 1960 issue.

From this coding we are able to maintain our files and to take the next step, which is to notch the plates so that the machine will automatical-

Elmer F. Maryatt, Jr. Office Manager

ly select and print requested data. At the present time, all plates are notched by chapter affiliation and type of membership.

Your dues notices were run by type of membership this year using the automatic selector. There were a few mistakes, but generally you received a dues notice for your type of membership. As we progress we will periodically be able to furnish chapters with lists of members by type of membership and to address chapter periodicals and schedules. We are equipped to do this either by direct impression on the article or by producing strip labels which can be affixed to the article to be mailed. The Speedaumat operates at a speed of 8,400 impressions per hour. Our current membership can be run in two hours.

Initials or First Names?

Consideration was given to both initials and first names, and after determining that the time required to type full first names would equal that necessary to produce 2,500 complete plates; that there would be an attending increase in error factor due to misspelling; and that approximately 10 per cent of the list would have combinations of names with more characters than the plates could accommodate when the proper title or titles were used, we chose to use initials exclusively. Some have found this to be offensive. Others cannot identify their mail in families where the practice of using the same initial for each child prevails. And some combinations of letters are almost humorous. Should you find that any of the above conditions apply to you, let us know and we will change your plate as you request.

The main thing is that the job has been done, that we can easily and quickly make address changes and that we are no longer dependent on an outside source for this important function of club business.

The first mailings have been run with the list wide open; that is, all members have been sent all mailings even though they requested their names be dropped from the list. If you wish to be dropped from the mailing list-even though you may have made a request prior to this time -we would appreciate a notification to that effect. Specify in this notification whether you want all mail stopped, all mail except the Bulletin stopped, or just the Bulletin stopped, and for how long. Your plate will either be pulled or notched accordingly.

-Elmer F. Maryatt, Jr., Office Manager

ANSEL ADAMS Announces

Yosemite Photographic Workshop

JUNE 9-17, 1961

Techniques of mountain photography. Demonstrations of basic techniques in black-and-white and color. Print critiicism sessions. Field trips,

> Assisted by Beaumont and Nancy Newhall and Gerry Sharpe

For information write E. Johanson, Mgr., Best's Studio, Inc. Box 455, Yosemite National Park, Calif.

Bulletin Board

More than 1,000 people attended the 7th Biennial Wilderness Conference, sponsored by the Sierra Club, held April 7 and 8 at the Sheraton-Palace Hotel in San Francisco. The Conference was highlighted by talks from a wide variety of distinguished speakers who touched on many aspects of the theme, "The American Heritage of Wilderness." Some 700 at the banquet—plus an uncounted radio audience—heard significant conservation statements by Governor Edmund G. Brown, Justice William O. Douglas and Secretary of the Interior Stewart L. Udall. Proceedings of the Conference will be published in book form by the Sierra Club.

Public Land Moratorium

A moratorium on land applications and petitions for rights in public lands has been declared by the Department of the Interior to extend to September 1962, subject to reclassification of these lands. Reasons for this moratorium include: (1) abuses by unethical land promotors; (2) impediment of the orderly disposition and the efficient management of lands best suited for continued federal administration; (3) wasteful current processing procedures; and (4) consideration of corrective legislation by the Executive and Congress. Many view this "as a first step toward a permanent procedure for orderly classification of public lands."

Agriculture-Interior Coöperation

★ Secretary of Agriculture Orville L. Freeman has stated that he and Secretary of the Interior Udall have discussed the problems of coöperation between the two departments with regard to surveys to determine the desirability of adding certain national forest areas to the national park system. Conservationists have urged such coöperation in the public interest. Secretary Udall, at the Wilderness Conference, gave assurance that this coöperation would be a primary part of his policy, and stated that he expected to see the end of the "locked horns embrace" between the departments.

*You have a constitutional right to express your viewpoint on these matters

Wilderness Declassification Appealed

★ Conservationists have appealed to Secretary of Agriculture Freeman protesting two recent decisions of Region 6 of the Forest Service: the declassification of (1) the Waldo Lake Limited Area, and (2) parts of the Three Sisters Primitive Area, from wilderness protection into "multiple use." They point out that the prime values of these areas—recreational, scenic and scientific—will be irrevocably lost to all people if commercial exploitation of them is permitted.

Minam River Country, Oregon

* Region 6 of the U.S. Forest Service has scheduled a public hearing at 8:30 A.M., at La Grande, Oregon, on a proposed Minam River road. The Service has made it clear that this hearing is not on the question of whether there should be a road up the Minam: it is only on the question of location of such road.

Mammoth Pass Road

★ The Bureau of Public Roads has scheduled public hearings at 10 A.M. on May 16 at 2314 Mariposa Street, Fresno, on the proposed Mammoth Pass Road which would cross the Sierra Nevada paralleling the San Joaquin River. Such a road would effectively sever the longest—and one of the finest—areas of wilderness left intact in the United States.

Big Basin Redwoods, California

★ The fate of some of the finest remaining virgin Redwoods near the metropolitan San Francisco Bay Area rests with Governor Edmund G. Brown. Logging has already begun above West Waddell Creek in the heart of the proposed expanded Big Basin State Park (see page 8). Unless this logging is stopped, present and future generations of Californians will lose a unique and priceless part of their native scene.

EDGAR AND PEGGY WAYBURN

Wilderness Cards From the Sierra Club



Part of the Skyline Trail in Oregon's Volcanic Cascades, an area which could be one of America's finest national parks. The Oregon Skyline Special outing in August will visit Mount Jefferson, the snowcapped peak in the center background, and Mount Hood, to its right. Wilderness Card No. 46. Photo by Sanford S. Tepfer.

Cards to help the Cascades and wilderness. Complete set of 49 cards—\$3

Subjects now being covered are: North Cascades, Washington; Volcanic Cascades, Oregon; Wind River Mountains, Wyoming; Sawtooth country, Idaho; and Point Reyes, California. Prices: giant, 15¢; jumbo, (like our front cover) 10¢; regular (left), 5¢; less 30% on orders of \$5 or more (at list price). Minimum order \$1. Write your chapter or Mills Tower.