

YOSEMITE NATURE NOTES

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Yosemite Nature Notes

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THE YOSEMITE NATURALIST DEPARTMENT
AND THE YOSEMITE NATURAL HISTORY ASSOCIATION

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ANNIVERSARY

By Frank A. Kittredge, Superintendent

With this issue we complete our twentieth year of publication of Yosemite Nature Notes, which was originated by Mr. Ansel Hall in July, 1922, as a mimeographed publication. Mr. Hall, the first man to hold the position of park naturalist, was one of the pioneers in this field, and much of the interpretive work being carried on in Yosemite as well as in other national parks stems from his early efforts.

Nature Notes was later undertaken as a printed monthly journal, beginning with the January 1925 number, by Dr. Carl P. Russell, who succeeded Mr. Hall as park naturalist in 1923. Throughout his years in that capacity, as well as during the succeeding period of 1929-1940, when Mr. C. A. Harwell so successfully directed the interpretive activities of Yosemite National Park, Yosemite Nature Notes has continuously developed. One has but to glance through past issues to observe how it has expanded into a gradually im-

proved unit in our program of interpretation of the varied interests of this region. Too, during the past twenty years one finds in these pages the names of many people who have been affiliated with important matters of policy upon which the high standards of public service in the national parks and monuments have been built. In addition the names of many eminent educators and scientists indicate a wide professional interest in that basic national park idea which seeks a development of broad public understanding of the fundamental laws and forces of nature as expressed in the dramatic, inspirational quality of the scenic beauty in the national parks.

Thus, those of us who are now entrusted with future developments in Yosemite recognize in this anniversary of Yosemite Nature Notes the responsibilities which are embodied in a continuance of the very able work of our predecessors.





YOSEMITE'S LIVING CHRISTMAS TREES

By C. Frank Brockman, Park Naturalist

Upon the Sierra uplands, of which Yosemite National Park is a part, grow a galaxy of cone-bearing evergreens, many of which will have representatives in numerous homes throughout the nation during the approaching Christmas season. From the rolling foothills of the lower elevations of the park to the ragged crests at timberline are found sixteen species of living "Christmas Trees." In fact, of all the groups of conifers which are most usually found in our homes at this time of year, only the spruces are unrepresented in Yosemite. So if a "Christmas Tree" is scheduled for a part of your Yuletide festivities, examine it carefully. Perhaps it will have a counterpart, or at least a close relative, in the Yosemite scene.

Most people are familiar with the pines. As noted in Group I of the accompanying sketch, their most distinctive character—the fact that their needles are, with the exception of the Single-leaf Pine, borne in clusters of

from two to five—makes this group of trees easy to recognize. They dominate the forests of Yosemite National Park both from the standpoint of general abundance and the number of individual species. Nine of our sixteen native conifers are of this group, and they run the gamut of the widely diversified soil, moisture and climatic conditions which characterize this rugged mountain region.

The Digger Pine with its handsome, heavy cones that appear like large, dark pineapples in the sparse grey-green foliage of the tree's open crown, and to a lesser extent the Knobcone Pine, are found to a limited degree at the lower elevations of the park along its western border.

Between the 3500 and 5500 foot levels the Western Yellow Pine is found in greatest abundance. It is one of the most common trees in Yosemite Valley. Indeed it is one of the most widespread North American conifers, and residents of many

parts of the west, from the Black Hills of South Dakota to the Pacific, and from Canada to Mexico, are undoubtedly familiar with its regal beauty.

At slightly higher elevations grows the Jeffrey Pine which greatly resembles the Western Yellow in many respects, except for larger cones, denser and darker foliage and the characteristic pineapple odor of the bark. Glacier Point, Little Yosemite Valley above Nevada Fall, and similar localities between 6,500 and 8,000 feet are characterized by its presence—though it is not limited to that zone. The picturesque wind-blown specimen atop Sentinel Dome is of this species.

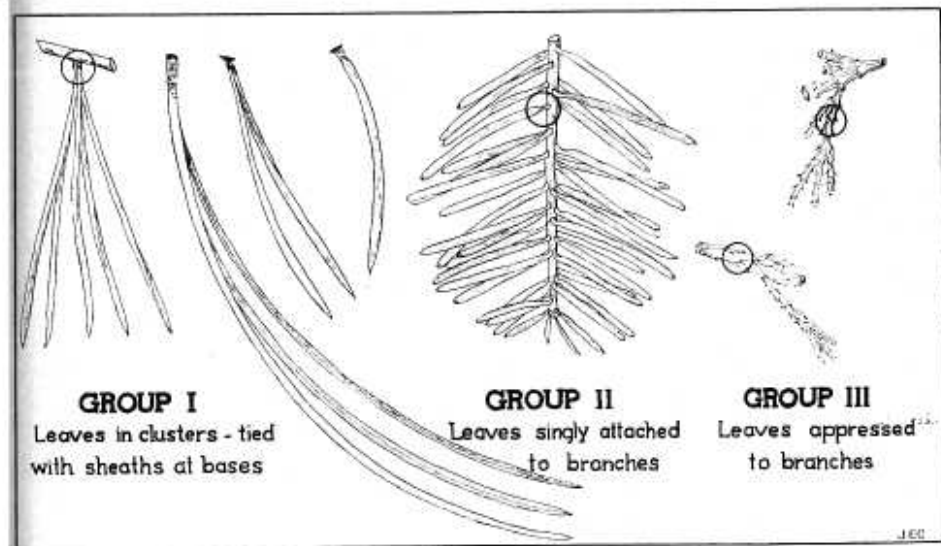
The foregoing pines are characterized by having their needles borne three to a "bundle." From 7,000 to 10,000 feet, although it is not exacting in its requirements and may also be found on the valley floor, one

finds extensive forests of Lodgepole Pine, which bears its foliage in groups of two.

The five-needled pines are equally as widespread as the three-needled varieties, although the former inhabit the upper elevations as contrasted to the three-needled pines which prefer the lower slopes.

Sugar Pine, that tree of large, handsome cones which often exceed 20 inches in length and in consequence have such high decorative value, is most abundant from 5,000 to 7,000 feet. In these areas one finds the finest stands of this noble tree that are available anywhere in the world. To Yosemite visitors they are most easily noted along the Wawona Road in the vicinity of Chinquapin Ranger Station and along the new Big Oak Flat Highway in the vicinity of Crane Flat.

Two other five-needled pines grow at successively higher elevations.

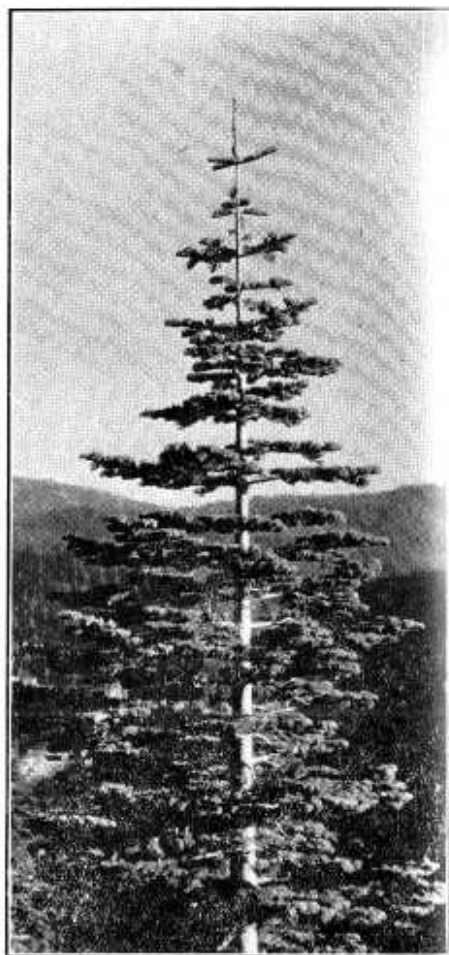


Western White Pine, which on a smaller scale bears a resemblance to the Sugar Pine, may be found from 8,000 feet to just below timberline; while on the crests of timberline, their ragged, windswept forms giving mute evidence of the terrific struggle for existence which they undergo in this region of driving gales and heavy winter snow is the White-barked Pine. Often these trees sprawl along the ground, their roots anchored in fissures of the rocky habitat to add one of the most picturesque notes to the scenic symphony of the high country.

But the pines are rarely used as "Christmas Trees." It is among that broad group of evergreens which are characterized by the fact that their needles are borne singly upon the branches, as noted in Group II in the accompanying sketch, that your tree will most likely be found. The true firs, Douglas Fir, and hemlocks are the native Yosemite conifers that fall in that class.

A distinctive circular leaf scar characterizes the true firs. Observe the branches of your tree where needles have been removed, and see if it possesses this character. If it does, it is one of the true firs which, in Yosemite, are represented by the White Fir, which is quite abundant on the floor of the valley, and the Red Fir, which is one of the dominant trees at Glacier Point and similar elevations. True firs are further characterized by the fact that the cones, borne upright upon the branches, disintegrate upon matur-

ity. Distinction is made between the Douglas Fir and true firs in view of the fact that the former species is, in spite of its name, not a fir. It has been called Douglas Spruce as well.



Red Fir Top

Lumbermen have known it as Oregon Pine, and its scientific name means "false-hemlock-with-foliage-like-a-yew." Yet, it is neither fir, spruce, hemlock or yew. With three

other species, only one of which is native to North America, it forms a specific genus of trees. It is the tree which has perhaps the widest use as a "Christmas tree." Although its foliage bears a superficial resemblance to that of the true firs, individual needles have a short petiole or stem, and when removed from the branch do not leave the round leaf scar characteristic of the other group. In addition the distinctive cones, characterized by three-pointed bracts which protrude between the scales, are pendent, rather than erect upon the branches. It attains its best growth and greatest abundance in the Pacific Northwest, although it is generally common throughout the west from the Rockies to the Pacific. Here in Yosemite, which is near the southern extension of its range along the Pacific Coast, it is found in considerable quantity in moist situations between 3,500 and 5,500 feet, being particularly abundant on the valley floor near the base of Yosemite Falls, about Mirror Lake and in the vicinity of Happy Isles.

Another of the tree mountaineers is the Mountain Hemlock. Singularly beautiful, its graceful form and delicate foliage are sharply contrasted to the rigorous nature of its customary surroundings for, like the White-barked Pine, it is a common member of the forest family in the vicinity of and at timberline. It has one striking feature in common with all hemlocks—a gracefully drooping top or central leader which is so distinctive that these trees can be

readily identified from their associates by this factor. For those who prefer a large ornament as the crowning note of a "Christmas tree," however, a hemlock is not a good choice for, as has already been stated, the weak central leader does not lend itself well to that type of decoration.

Trees with scale-like foliage include, among the native conifers of Yosemite, the Incense Cedar, Western Juniper and Big Tree or Giant Sequoia. Although none of these come into wide use as "Christmas trees," they are familiar members of the Yosemite forest family, and add considerably to the beauty and in-



terest of this area. However, in the Grant Grove of Big Trees of Kings Canyon National Park — Yosemite's National Park neighbor to the south—an impressive ceremony is held annually at noon on Christmas Day. This "Nation's Christmas Tree" ceremony, as it is officially known, takes place at the base of the General Grant tree. Thus, the sequoias, represented by one of their oldest and largest specimens, are made symbolic of the season.



MUSEUM NOTES

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By Harry C. Parker, Junior Park Naturalist

Yosemite will be on the air with a series of thirteen broadcasts over station KYOS, Merced, on Thursdays, commencing November 6 at 4:30 p. m., and continuing through February 9, 1942. The title of the series is "Tales from Yosemite," the main idea being to portray the highlights of the human and natural history of Yosemite National Park by means of interesting and pertinent dialogue. While the leading parts in the broadcasts will be taken by actors from the staff of KYOS, it is planned to have regular employees of the National Park Service at Yosemite participate whenever feasible. Unless unusual circumstances necessitate changes, the following schedule will be presented:

November 6, The Gold Rush and James Savage

November 13, James Savage and the Discovery of Yosemite

November 27, Historic Tour of the Valley

December 4, Glacier Point and Geology

December 11, Ski Stories and Ranger Patrols

December 18, Ranger Work and

Chief Townsley

January 1, Bear Stories

January 8, Yosemite Indians

January 15, Eagles, Hawks, and Owls

January 22, Mountaineering and Rescues

January 29, Deer Stories

February 2, John Muir

February 9, Trees.

For the past several months, a foyer case has contained an exhibit commemorating the work done by the naturalist division during the two decades it has been in existence. The display employs photographs of the first nature guide parties in 1920, a composite photograph showing the multiplicity of services offered today, and depicts the development of the park museum idea and the growth of Yosemite Nature Notes.

During the past summer the beauties of the habitat groups in the natural history room have been more fully brought out through the instal-

lation of fluorescent lighting. The new illumination approaches the impression of daylight, thereby enhancing the naturalness of the scenes depicted. These improvements also include the lighting of the life zone chart in the same room.

The mummified mountain sheep, found in the Mt. Lyell Glacier in



1933 by Associate Park Naturalist Beatty and C. A. Harwell, former Yosemite Park Naturalist, has been mounted on a brass stand and protected by a glass case. It is now installed in the research room at the headquarters museum, and may be seen by any interested visitor upon application to the Park Naturalist's office.

On August 20, Mrs. Cosie Hutchings Mills, the second white child

born in Yosemite, and the daughter of J. M. Hutchings, returned to Yosemite after an absence of 42 years. Mrs. Mills contributed a number of historical items on early days in Yosemite for our separates file and donated to the museum an old manzanita arm chair made by her father, together with a powder horn, shot pouch and cap holder purchased by her from one of the original Indians in Yosemite. A complete article concerning Mrs. Mills' visit will appear in a future issue of Yosemite Nature Notes.

The annual glacier survey was conducted from September 26 through October 2 this year, but due to the great amount of snow still remaining from last winter, no effective measuring could be done, and the party had to be content with making a photographic record of conditions at each glacier. Members of the



party were: Park Naturalist C. Frank Brockman, Associate Park Naturalist M. E. Beatty, and Junior Park Naturalist Harry C. Parker.

"PORCUPINE TREE"

By Charles B. Todd, Field School, 1941

A large "porcupine tree" was observed by the Field School near the top of the ridge between Breeze Lake and Upper Chain Lakes near Gayle Peak at an elevation of 9,500 feet. This tree was of special interest because it was a Western White Pine. Porcupines usually feed on Lodgepole Pine, supposedly because the bark is rather thin.



At the base of a Western White Pine about 3½ feet thick, we observed a considerable number of porcupine droppings on the ground around the base of the tree for about 8 feet in all directions. An investigation revealed two other Western White Pines near by which had probably been occupied by the same animal. In the immediate vicinity there were several Mountain Hemlocks of considerable size

and a few Lodgepole Pines, but these had not been used by the porcupine.

The first two trees showed a number of places where fresh cuttings had been made. These were on the branches from 8 inches to one-half inch in diameter. The bark from the trunk of the tree had not been eaten.

These trees were protected from the wind by being near a steep cliff. They were about 80 feet tall, and the branches were short and bushy; thus affording more protection to the porcupine.

There were a large number of partially decomposed pellets under this year's deposition at the main tree. It seems reasonable to assume that the tree had been used by the porcupines for at least two years.

NATURE NOTELET

By Ranger-Naturalist Willis A. Evans

On July 10, 1941, I watched 8 to 10 Brewer's Blackbirds along the margin of the Merced River feeding upon the emerging May-flies. It was just at twilight when the greatest number of insects were hatching out. The blackbirds would fly up from the bank, catch the May-flies on the wing, in the manner of a flycatcher, and then light again on the bank. During the entire time the birds were singing lustily.



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Dan Anderson