

Vol. XVI

September 1937

No. 9

# Yosemite Nature Notes

# The Publication of The Yosemite Naturalist Department And the Yosemite Natural History Association Published Monthly

Volume xvr

September 1937

Number 9

## Interesting Notes from the Whitney Guide Book

By ELIZABETH FOOTE Field School, 1936

"The Yosem te Valley is a unique and wonde ful locality; it is an exceptional creation, and as such has been exceptionally provided for jointly by the Nation and the State, -it has been made a National public park and placed under the charge of the State of California. Let Cal'fo nians beware how they make the name of their State a byword and reproach for all time, by trying to th: ow off and repudiate a noble task which they undertook to perform,-that of holding the Yosemite Valley as a place of public use, resort, and recreation, inalienable for all time."

So, in righteous indignation, wrote a party of the Geological Survey of California sent out in the late 1860's to write a guide book to the Yosemite region. The party, under the leadership of J. D. Whitney, first State Geologist, spent the summers of 1866 and 1867 exploring and mapping the little known and inacces-

sible "Cleft or Gorge in the Granite Peak of the Sierra Nevada Mountain,-known as the Yosemite Valley" which had been set aside by signature of President Lincoln June 30, 1864, and accepted by California in 1866 to be held "for public use, resort and recreation." Tremendously impressed by the natural features of the area, the group was shocked to find that a bill had been passed by the State Legislature deeding 320 acres of the Valley floor as indemnity to James Lamon and J. M. Hutchings, two early settlers-hence, our first paragraph. Fortunately for future generations, Congress side-tracked confirmation of this action. The State later voted \$60,000 to pay off the claims of the two home-steaders.

The Yosemite Guide Book published in 1870, was the result of the findings of the party made up of Messrs. Whitney, King, Bolander, Gardner, and Brinley, and concerned itself primarily with descriptions of the region, designed to aid and encourage the early tourist. Politics threatened to invade Yosemite, and the group was particularly fearful that this virgin area might again pass into private ownership.

Travel facilities in 1870 appear primitive to moderns. Travelers who had already made the steamer trip from San Francisco to Stockton took their choice from the routes appearing in the mileage chart given in the Guide Book.

On wheels, Big Oak Flat 63, Coulterville 71, Mariposa 10134; Horseback, Big Oak Flat 4414, Coulterville 4812, Mariposa 3716; Total, Big Oak Flat 10714, Coulterville 11912, Mariposa 13816.

A "round trip" was recommended, the tourist coming into the Valley by way of the Coulterville Trail and leaving by way of the Mariposa Trail. No road came closer to Yosemite than Mariposa. Ten days was the minimum a traveler should allow for the journey from San Francisco, and of this three days could be spent in the Valley, one in the Big Trees, the remaining six being spent in transit. Reassuring is the comment that "there is nothing in the trip which need excite alarm in even the most timid person, as the trails are nowhere dangerous, and it is always easy to dismounted where the slope is too steep for riding with comfort to man or beast."

Victorian women were apparent-

ly far more adventurous than most literature of the period would have us believe, for the Guide Book bears several injunctions for the benefit of their sex. In discussing the "Mist Trail" the authors write: "The path up the side of the canon near the fall winds around and along a steeply sloping mountain-side, always wet with the spray, and consequently rather slippery in places. Ladies, however, find no great difficulty in passing, with the aid of friendly arms, and protected by stout boots and India-rubber clothing b.ought from the hotel." A note of warning is sounded here: "Persons who are not accustomed to climbing, and especially ladies, are strongly advised to ride out of the Valley on the regular trails, rather than risk getting over-fatigued in performing acrobatic feats, which are not at all necessary to enable one to see and enjoy the whole region."

Members of the party not only mapped Yosemite Valley, but by way of the Mono Trail, near the present Tioga Pass Road, made their way to Tuolumne Meadows, thence to Hetch Hetchy, to Little Yosemite, and finally to Glacier Point, Mainly for purposes of indentifying peaks in their topographical study, they named several mountains, and remarked that "the name: thus given by us will be adopted by the civilized and scientific world abroad, however much our disinclination to bestow on prominent points the names of great politicians and

editors may be criticized in California." "We have selected for this purpose the names of explorers, surveyors, geographers, geologists, and engineers, and especially of such as have worked or lived in the region in which the point to be named was situated" and also "the names of very eminent geographers. geologists, or physicists, who have labored successfully in general science, and whose results have thus become the property of the world." Mount Dana, Mount Lyell, and Mount Ritter are amony the peaks thus named by the State Geological Survey. Many mountains in this a.ea were climbed by the party, but their considered opinion of Half Dome was that it was "perfectly inaccessible, being probably the only one of all the prominent points about the Yosemite which never has been, and never will be, trod by human foot."

The High Sierra excited the admiration of Witney's group, and they went to some pains to compare it, point by point, with the Swiss Alpr, commenting drily that: "There are probably ten times as many persons in California who have traveled for pleasure in Switzerland, as among these most interesting portions of the Sierra."

Scientifically, the purpose of the expedition was, of course, to make accurate maps of the area, which they did, but some time was obviously spent on the botany and geology of the region. It is well to note that here is one of the early

expositions of the Life Zone theory. now subscribed to in one form or another by most botanists and zoologists. "There are four pretty well marked belts of forest vegetation on the west slope of the Sierra, and that of the eastern slope would make a fifth for the whole range." The Guide Book then discusses them in turn. First, the foothills growth, characterized by the Digger Pine (Pinus sabiniana), California Buckeye (Aesculus californica), and varieties of California Lilac (Ceanothus). From this, what is now called the Upper Sonoran Zone, the authors go on to accurately describe. although naturally not by these names, the Transition, Canadian, and Hudonian Zones. Plant markers are given to identify each zone, and many of these are the ones recognized as most trustworthy today.

Geologically the party advanced a subsidence theory in explaining the formation of Yosemite Valley, and disposed of the glacial idea, now universally accepted, in this summary fashion, "Much less can it be supposed that the peculiar form of the Yosemite is due to the erosive action of ice. A more absurd theory was never advanced than that by which it was sought to ascribe to glaciers the sawing out of these vertical walls and the rounding of the domes. Nothing more unlike the real work of ice, as exhibited in the Alps, can be found. Besides, there is no reason to suppose, or at least no proof, that glaciers have ever occupied the Valley or any portion of it,—so that this theory, based on entire ignorance of the whole subject, may be dropped without wasting any more time upon it." And yet when the party visited Hetch Hetchy, which they termed "almost an exact counterpart of Yosemite" their report is that there is no doubt but what it was formed by glacial action.

It should be noted here that Clarence King, who had just joined the Whitney party as a student to earn his way, submitted a "minority" report disagreeing with his chief. He held that there were evidences of glaciation in Yosemite Valley and attributed much of the sculpturing effect to the work of ice. Clarence King later became first Director of the United States Geological Survey in 1867.

Whitney and his group also visited many of the groves of Big Trees, including the Mariposa Grove, in order to publish what they believed to be the first accurate account of the distribution, size, and age of this already widely publicized species. It was apparently largely a "debunking" mission, for many of the stories circulated about the giant Redwoods were considerably taller than the trees. Careful measurements of circumference and height were taken and published.

It is easy for us to now to look at this old Guide Book, smile at what have proved to be scientific fallacies, be amused by the quaint tone and extravagent superlatives which pervade the text, and indeed be horrified by the lack of accommodations and transportation. But the men who wrote this book were among the last of our own pioneer; and explo ers, and not only did they serve well in this capacity. they were also men of vision. With the true spirit of Nature-lovers, they appreciated the wonders before them, and at the same time hoped and planned for the time when "hundreds, nay thousands" would come to Yosemite yearly to enjoy it without the cheapening atmo phere of the profitable amu ement park.

### Fish Planting - An Adventure

By Ranger-Naturalist Harold E. Perry

Seldom does a Yosemite rangernaturalist have the privilege of accompanying a fish planting expedition. His educational contacts with the park visitors are usually most numerous about the time that the work of planting fish is being done, so he has to get his information relaive to this last and importent phase of fish culture from one of the men in charge of the Yosemi'e Hatchery or from the ranger who supervises this work in the park, There are exceptions to all generalities, however, and my recent good fortune is an example, for I have just returned from a trip to Chowchilla Creek, some ten miles from Wawona, where I was privileged to assist Mr. Archie Thompson, Superintendent of the Yosemite Hatchery, and Mr. Ray Brewer in planting ten thousand Loch Leven trout.

These trout were hatched about four months ago from eggs which arrived March sixth from the Mt. Whitney Hatchery. This morning (July 21) they weighed approximately fifty to the ounce and one thousand trout, or wenty ounces, were weighed out for each of the ten fish transportation cans which were used in today's adventure. Each thousand trout unit was emptied into a ten gallon can conaining six or seven gallons of water. Every can was covered with burlap jacket. Ice was added to each container and before our departure, the burlap jackets were raturated with water as an additional aid in main aining a lower water temperature within.

By eight for y we were on our way. Because of smooth road conditions between Yosemi'e Valley and Wawona, the fore part of he trip was made quite rapid y in an effort to reach quickly the rougher road over Chowchilla Mountain where the jerking of the truck would agitate the water sufficiently to aerate it constantly. At Wawona ice was again added to the water

in each can and it was noted with satisfaction that the trout were remaining at the bottoms of the cans,-proof that the water was adequately rich in oxygen. If at any time during the trip we had observed the trout rising to the surface of the water, it would have been necessary to aerate the water immediately, either by rocking the truck or by using a special, perfora ed can having a goose-neck pipe attached to it, by means of which it is possible to lift a quantity of water and allow it to pour back through the large perforations. No difficulty arising from lack of oxygen was encountered at any ime during this trip, The baby trout were apparently very healthy and they seemed to s and the trip satisfactorily.

When Chowchilla Creek was reached at a point ten miles from Wawona, plantings were made in three rather widely separated areas. A each stop, the fish to be planted the:e were emptied into a special pail which had two screen insertions on opposite sides near the top to a low surplus water to escape without loss of fish. From this special pail, the trout were emptied into other pails which could be carried conveniently to the stream's edge.

The water in Chowchilla Creek was somewhat warmer than that in which the fish had been transpor'ed so before the actual planting was made at each stop, it was necessary to equalize those temperatures. This was done by adding stream water to the pails until equalization was accomplished. Then the baby trout were liberated, a few at a time, in the quiet pools along the edge of Chowchilla Creek, a creek which we saw companioning with the showy blossoms of columbines, scarlet monkey flowers and leopard lilies and with a charming display of the delicate rein-orchis.

Almost immediately, the tiny trout began to dis ribute themselves along the stream. The stronger, more rugged ones felt he edge of the current and were soon seeking adventure in an upstream direction. The weaker ones were frequently caught by the moving wa er to be carried to pools iarther down where in quie.er waters they will no doubt recuperate from he effects of their long journey. All were hungry because

of an enforced fast during the preceding twenty-four hours. Their desire for food will do much in assisting them to adjust themselves to their new home.

Thus it was finally possible for us to write "finis" to the long story of human effort and achievement behind those baby trout, a story which began in the higher mountains of the Sierra where adult trout were trapped enroute to their spawning areas, and where they were stripped of the eggs and mi.t made today's adventure po sible. Another stream has been restocked with trout which will bring an abundance of satisfaction to an unknown number of patient anglers for many fishing seasons to come, and a grateful rangernaturalist has been able to enrich his background of experience in the fa cinating study of fish cultu.e.



#### Water Ouzels at Home

Ranger-Naturalist M. D. Bryant

I left Mirror Lake on the morning of June 15 with a regular group of all-day hikers to explore the rugged beauty of Tenaya Canyon. The churning waters of Snow Creek altered our plans. The heavy snows of the past winter were melting rapidly and the water was too high for a safe crossing. Finding that we could not cross the creek we walked to the foot of the falls, enjoyed the wild scramb.e of the waters for a time, and then started on our way down. Shortly thereafter a slate-gray flash of a bird caught my eye. It flew upstream, scarcely a foot above the water, and suddenly disappeared in the spray. I climbed over a large boulder, balanced on a projecting rock, bent as low as I could, and was rewarded with a splendid observation of Water Ouzels at home. I have seen nests of Water Ouzels in many situations. One was attached to the vertical surface of a boulder on the Merced River, one was above a fall on the Lyell Fork of the Merced River, one was on a shallow shelf many feet above Tenaya Creek. I have heard of the birds nesting in a spray-splashed fallen log near the base of the Lower Yosemite Fall. Although these nesting sites are in many cases unusual. I feel that the one discovered on Snow Creek merits special attention. The nest is fifty

yards below the base of the falls and about twenty feet to the right of the trail leading up to the observation boulder. It is under a small overhanging ledge and is about two feet back from the margin. water divides a short distance upstream from the ledge. A portion comes over the western half of the ledge in a miniature fall and the major part rushes past the eastern edge. The roof and walls of the nest are composed of moss and are in good condition. Bare granite forms the floor. The nest seems to have been used before and must have been constructed when the water was lower than now. Since the nest is constantly drenched by the spray blown from the tiny fall the eggs must have been incubated and the young reared under conditions that would have spelled doom to most birds.

The parents were not at all frightened by my nearness and continued to make their hurried excursions downstream in search of food for the young. Both followed the same ritual in taking the food to the young. They would fly upstream with larvae in their bills, light on a nearby rock for a momentary survey of the surroundings, fly between the two streams of water, perch on the rock under the fall, shake the water from the feathers, pull the white nictitating

membrane over the eye a time or so, and present the food to the gaping mouths of the young birds in the nest,

The members of the hiking party also had the opportunity to take part in the study and we returned to Mirror Lake feeling that the time had been well spent even though our original plans had gone astray.

#### WESTERN MEADOWLARK ON HALF DOME

By

F. Wallace Taber, Field School '37

Although quite common at lower elevations, it is a rare occasion when a Meadowlark is observed at elevations as high as that of Half Dome, 9,930 feet. On June 27, about 12:30 noon, Bill Richardson, Bob Waste and the writer were walking around on top of Half Dome when a Meadowlark was ilushed from behind a small granite ledge. It took to the air about 20 feet in front of us, circled, and flew out of sight over the edge of the cliff to the northeast, out over the valley proper. Its characteristic fluttering flight and bright pattern easily distinguished it as a Western Meadowlark. Although the quick tailspreads were numerous, revealing the lighter outer tail feathers, the usual accompanying "chucks" were absent, and the bird went away songless. Nevertheless, its identity was certain and all the party agreed that it was indeed an unusual opportunity, perhaps even a new altitude record as the highest one reported in Grinnell and Storer's Animal Life in Yosemite was on a pass £,700 feet in altitude near Ten Lakes, on October 11, 1915.



Meadowlarks are rare in Yosemite.

It is interesting to speculate upon the cause of the bird's appearance Meadowlarks are not known to be migratory, so the one observed could not have stopped in migration. Seeds and insects a e relatively scarce so undoubtedly food was not the cause of it's presence. At this time of year, Meadowlarks are beginning to form flocks, so another question arises as to why the bird was alone, All these points are of interest, but of equal interest is the fact that less than two hundred yards farther down on a Sierra Nevada Rosy Finch was observed feeding.

