YOSEMITE NATURE NOTES

XVI June 1937 No. 6

Yosemite Nature Notes

THE PUBLICATION OF
THE YOSEMITE NATURALIST DEPARTMENT
AND THE YOSEMITE NATURAL HISTORY ASSOCIATION
Published Monthly

Volume XVI | June 1937 | Number 6

Yosemite Junior Nature School Notes

By WALTER G. HEIL Ranger-Naturalist

Each year the value of nature guidance for boys and girls and the foundations which it gives for conservation is being considered more and more. The appreciation and understanding that is gained fundamentally is vastly more important to them than it would be in later years. In Yosemite it is the purpose of the Junior Nature School to acquaint all children, who do so desire, with the natural history of the region and to point out the purpose of the National Parks as well as all phases of conservation. These ideals are not only held to be important to our youth but to future generations.

Soon after nature guiding was started in Yosemite in 1920 by Dr. H. C. Bryant, now Assistant Director of the National Park Service, special work was undertaken for children. A schedule of Children's Nature Walks was carried out each summer. In 1930 Park Naturalist Harwell organized the Junior Nature School with daily sessions, age groupings, attendance requirements, and awards to stimulate and hold interest. The School has grown more popular each summer.

The 1936 summer meeting of the Yosemite Junior Nature School showed an increase in the numbers availing themselves of the activities of the school with a total enrollment of 410 children. There was an average attendance of 70 for the six weeks that the school was in session and as many as 119 attending on a single day. The activities consisted mostly of field instruction, observations and nature games; but in addition, four auto caravans, one Indian demonstration and a treasure hunt and picnic offered variation. Also considerable special time was spent with the Junior Leaders in addition to the regular program.

Too much can not be said for this group of older boys and girls who have become volunteer leaders, known as Junior Leaders. This group has come up through the guidance of the school and completed all the work available. This year two more leaders joined the eighteen that have already passed the nature school tests in the two preceding years. The comprehensive training system and tests set up for these people prepares them for the responsibility of helping with the younger boys and girls and in passing them on Junior and Senior Award tests.

As in the past two years, two issues of a mimeographed Junior Nature Notes magazine were published. All articles contained in the magazines were written by boys and girls in the nature school and the work of publishing was done largely by the Junior leaders.

Editor's Note:

The following two Nature Notes have been chosen from those submitted by Mr. Heil. They are printed just as written except for minor corrections.

COMMON FOODS OF THE EARLY YOSEMITE INDIANS

By Dorothy Gallison, Age 16,
Yosemite, California

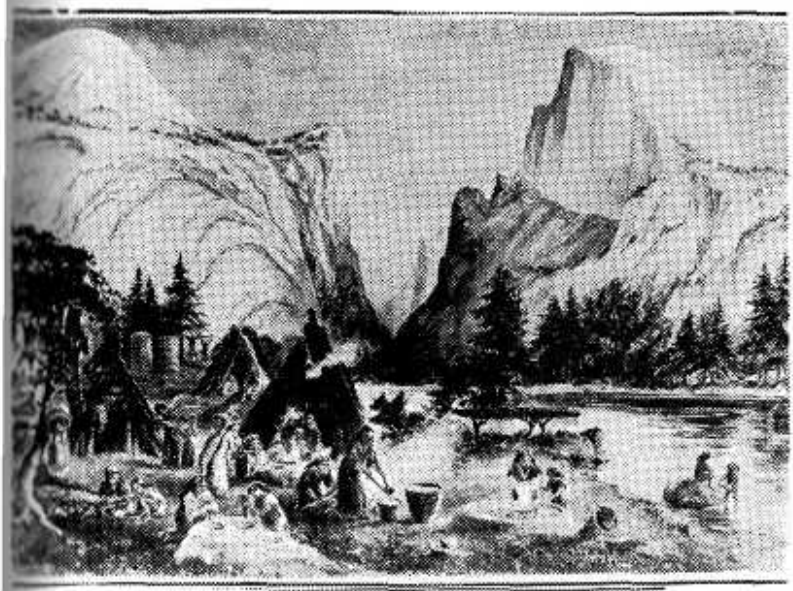
The foods of the early Yosemite Indians might be classified into three groups; the animal, insect and vegetable foods.

It might be interesting to notice in the group of animal foods, the Indians ate nearly every one of the larger animals, such as the deer, mountain lion, wildcat and mountain sheep excepting the coyote and the bear which were sacred to them. As the group of rodents and gnawing animals were plentiful they also were eaten frequently. The gray squirrel, ground squirrel, chipmunk, chickaree, ring-tailed cat, badger and almost all smaller animals were eaten. Fish were plentiful and also provided an interesting sport, so were eaten often. Most every bird that could be caught was used for food.

In the group of insect foods, we might notice three more common ones; the larvae of the Pandora moth, the Ka-cha-vee fly and the grasshopper. Each type of insect was cooked or roasted in a certain way.

The group of vegetable foods seems to be the largest as it includes nuts, berries and various types of plants. The acorn was used for nearly every meal in several different ways. In case of a shortage of acorns of the Black Oak, acorns were used from the Golden Cup Oak tree. There were many wild berries such as the blue elder berry, thimble berry, gooseberry and wild raspberry, which were eaten as a dessert. The mazanita berry was made into a cider which was relished by the Indians. The meadows of Yosemite Valley were covered with many flowers so the Indians used them commonly in their diet. The

bulbs of the brodiaea and wild onion were also eaten. Seeds of pepper grass, wild timothy, sour grass and poppy, were used for seasoning. Nearly every common flower or grass could be used when prepared in a special way so that the diet of the Indians could be varied.



JIGGS, THE PEST

By Paul Majouran, Age 14
San Francisco, California

A young fawn was found in a meadow and was brought to a ranger station. The ranger did not know what to do with it so he gave it to a lady by the name of Mrs. Blaine. She fed the baby fawn with a nursing bottle. Finally Mrs. Blaine had to go away so she gave the fawn to Mrs. Clark, mother of Ranger Sam Clark who is now stationed at Sequoia National Park. Mrs. Clark gave him a spring and a mattress to sleep on. She also gave him a tent to sleep in. As soon as he got old enough he would follow Mrs. Clark to the store and later still, began to do as he pleased.

Jiggs went from tent to tent to beg for something to eat, and occasionally he would stop and poke his head into a tent and if no one was there he would go in and lie down on the bed. This tent belonged to a telephone operator, Mrs. Mack. When she arrived home she scolded her husband and told him not to put his dirty shoes on the bed. Mr. Mack said he never did such a thing. The next day Mrs. Mack came home, and found Jiggs on the bed. She told her husband about it, so they put a lock on the door and put the key

in a guest tent. When Jiggs came around later he couldn't get in the tent so he went around to the guest tent to sleep. Mr. Mack came home this time and went into the guest tent to get the key. He saw Jiggs sleeping there so he got a big stick and chased him down the road past a garage. A lady saw him chasing the deer with a stick and she said she would report him to the ranger for abusing animals!

Several nights later some people were having a party. They made some claret punch which they left out on the porch to cool. Jiggs came along and tasted some of it. He liked it so well he drank half a gallon of it. After that he felt very frisky and charged a wicker chair making a lot of noise. A lady came out of Foley Studios to help him but Jiggs dropped the chair and chased her back into the house. Then Jiggs went around the back way and ran into a chinese jar which was about three feet high. The noise scared him away.

Jiggs learned that he could frighten girls by jumping at them. He would go in the meadows and wait until the girls would go to school, then jump at them. They would scream and be terribly afraid. Finally he became such a nuisance that they had to shoot him.

Yosemite Rainbows

HELEN K. SHARSMITH Field School '30

Each summer midafternoon in Yosemite Valley many people stand enchanted at Tunnel View as the sun's rays, striking at gradually increasing angle, cause the arc of primal color lying in the luminous mist at the base of the Bridal-veil Fall to rise higher and higher. This is a fragment of Yosemite beauty familiar to most. Near any of the other waterfalls, while the sun's rays are directed upon them, the visitor sees again this rainbow arc, poised motionless in the engulfing mist, or slowly shifting from side to side as with the whim of the wind, fading to dimness or breaking forth in an astonishing brilliance of color. The pot of gold at the end of the arc continually beckons.

The rainbows of the sun can be seen each clear day of the summer, but the rainbows of the moon occur far less frequently and are seldom looked upon. Only when the moon is full or nearly full, is there sufficient strength of light to make the lunar rainbow visible. And only when the waterfalls are in flood is such a rainbow revealed in full beauty. The lunar rainbow of the Upper Yosemite Falls is justly the most famed, but the phenomenon is visible, when conditions are right, at the base of the other falls as well.

In May, June, or even July, when the waters of Yosemite Creek shoot thunderingly over the brink of the valley rim, on the night when the moon is full, then is the time to climb the zigzags of Yosemite Falls trail in search of the lunar rainbow. As the Upper Fall comes fully to view from the trail, the climber has his first glimpses of the rainbow, but not until he is standing in the heavy spray on the large table rocks near the base of the falls does the rainbow show itself in completion. The mist envelopes the observer, soaks his clothes, the strong air-currents buffet him, the noise deafens him. Before him in the billowing clouds of mist lies the delicate band of color that marks the lunar rainbow.

Faintly at first, then with assurance, the observer discerns the varied colors of the spectrum, red on the outside of the bow, violet within. The arc lengthens as the wind shifts the mists, recedes and lengthens again. Elusively as the rainbow of the sun it points to the buried treasure—a pot of silver rather than a pot of gold. The great cliffs standing in subdued relief, the thunder of the down-pouring water, the hidden depths of the canyon below where the shaken waters gather themselves together, all combine in making the scene a breathlessly eerie one. At moments when the onslaught of the spray is most intense, the arc of the lunar rainbow completes itself around the table rocks. Where now to hunt for the pot of silver? The observer is standing upon it—it surrounds him, engulfs him. It is his! Iris, Greek goddess of the rainbow and messenger of the gods, has delivered her treasure.

A Meeting with a Rosy Finch Family

(Ranger-Naturalist Carl Sharsmith)

A meeting with a family of the Sierra Nevada Rosy Finch (Leucosticte tephrocotis Dawsoni) is not known as a common event in bird study in Yosemite. This, however, was the experience of a group of Tuolumne Meadows campers on a naturalist-conducted trip to Gaylor Lakes, July 21, 1936.

Above the highest and most easterly of the five lakes collectively called Gaylor Lakes, stands an old stone cabin, a relic of the mining days of the 80's. The walls are sturdily built of rough rectangular blocks of the metamorphic rocks of the vicinity, and, despite the years of vicissitudes of winter storms, severe at this altitude of 11,000 feet, they still retain in most part their original shape. Here, deep in the crevices of the rocks composing the south wall of the cabin, about six feet above the ground, a family of Rosy Finches had apparently established itself.

A thunderstorm had caused us to seek shelter in the old cabin. There, while awaiting for the storm to "blow over," the unmistakable cry of a baby bird suddenly attracted the attention of everyone—a cry that sounded as though the owner of the voice was within the cabin itself. Following were the familiar chirps of the Rosy Finch. Immediately and naturally the exciting idea came to us that nearby, very close, was a nest.

While in artic-alpine surroundings one is always on the alert for any goings-on of the Rosy Finch tribe. The naturalist had spent many seasons in their haunts, and many an opportunity had been given for close observation of their daytime habits, but never with the reward of seeing a nest. Here, then, in an altogether unexpected fashion and place, was that for which he had sought in vain among crags and glaciers—at least, that was the first impulse of the idea!

The baby birds were soon found, for there were two of them, deep in the above-mentioned wall. At the moment of discovery one of the little fellows was ensconced on the "doorway," simply a rock perch on the outer surface of the wall, outside the cabin. It seemed preparing for a "take-off." The worn appearance of the juvenile down, on the head especially, and the partially grown mature features, showed that it was practically a fledgling. No doubt its sister—or brother—was equally far along. In a few days or less they would fly. We had just arrived in time.

A brief interval of waiting and the parents arrived to feed them. One of the parents stayed outside; the other parent went with the fledgling into the recesses of the wall. For a time we heard the usual confusion of the youngsters being fed. On the emergence of the one

adult, and both parents leaving the vicinity together, opportunity was given for a closer look at the "nest." But nothing was in there in the way of nesting material; there was nothing put in among the rocks to help soften them for the brood. A sheltered cranny among the rocks appeared to be sufficient. Was this, after all then, really a nest?

The nesting habits of the Sierra Nevada Rosy Finch have been only obscurely known. Fortunately, recent field studies by J. B. Dixon in the Mammoth Pass region (Condor 38: 2-8. 1936) have clarified many points. A regular nest is constructed, those several nests of Mr. J. B. Dixon's observations being "much alike as to materials used, being well made of wet moss at the base . . . and lined with dry grass and feathers." From these facts our Rosy Finches in the cabin wall were not in their nest at all. Rather, their presence there seems to be explained by Dixon's further observations in the same region above mentioned. He says, "The young birds did not stay in the nest over ten days, and the parents seemed anxious to get them out and hidden in the rock-piles nearby, only one young bird in a place. In several instances we flushed young birds from the rocky slopes under the cliffs and soon the parent bird would appear with food and go to the place where the youngster had been left and give the usual note which would be answered by the young bird." If these notes are applicable to our case, then an abandoned cabin was used for this phase of the breeding, and two birds were in place.

Thus, while no nest was discovered, we were fortunate to come so close to a busy family of the Rosy Finch. As far as we are able to learn, this is the first observation of the use of a human habitation by this bird during its breeding season.

I am grateful to Mr. J. B. Dixon, for the material from which I have taken the liberty to quote, and to Mr. J. S Dixon, Field Naturalist of the National Park Service, for calling my attention to this work, and for additional suggestions.

THIS AGE OF PROGRESS

Plans for winter angling in the Sierra are maturing rapidly, according to Ranger Lon Garrison. A species of fur-lined trout (Salmus irridius furtrimmingus) has been developed, and as soon as a suitable food supply can be discovered, they will lend year-round sport for the hardy Ike Walton. Transplanted to the brawling, boisterous high mountain streams, they will not seek the bottom of deep pools, but splash in the rapids. When weather permits, these fur-lined fish have even been known to use their peculiarly shaped front fins as skis, and their dorsal fin as a sail, and to go in for winter sports!

LIGHTNING SCARRED TREES

By ROBERT JOHNSON
Ranger-Naturalist

In the higher country, with special reference to the vicinity of Merced Pass, a great many trees are scarred by lightning. Along the high ridges one can see any number of lofty sentinels whose bark has been seared. Naturally, those trees standing in the most susceptible positions such as ridges or peaks are struck most often.

Most of the lightning scars follow a spiral motion, stripping off from two to five inches width of bark. The length of the stripping varies, some trees having about fifty feet of bark removed. The scar winds but once in a spiral motion in most trees observed; however, many were seen with a two or three-fold twist.

Variations in the form of the scar itself are seen in many trees where the bark is not stripped uniformly, but appears in sections. Evidently, lightning has a tendency to skip. The branches in the path of the scar are not affected, although the bark is always stripped off at their base.

A large Jeffrey pine was hit by lightning his year up at Glacier Point. This pine is only about a hundred feet from the Glacier Point Hotel to the left of the footpath leading out to the Overhanging Rock. The tree is about 120 feet high and is marked over half its length by the long winding scar. The mark is three or four inches wide, and makes two complete spirals in its course. It is a typical lightning scarred tree.

MANZANITA BLIGHT

By Ranger Lon Garrison

A growth on Green Manzanita (Arctostaphylos patula) that has been observed at Mariposa Grove on the hill back of the Ranger Station, and that appeared to be either a mistletoe or some type of pathological growth was sent to the New York State College of Forestry at Syracuse, New York, for identification. Dr. Hirt of the department of Botany and Plant Pathology found no evidences of either fungus or mistletoe, so turned the sample over to Mr. Wm. H. Bennett of the department of Forest Entomology. According to Mr. Bennett, there are evidences of the wo kings of insects within the leaves of the infected foliage—probably a tiny caterpillar. Also, in the node where the infected twig grows from the main stem, there are further evidences of insect workings. No living insects were found, but empty egg cases, as well as excreta indicated that they are very likely tiny caterpillars.

There is not a great deal of this diseased growth found, but when it is discovered, it may be identified by the much thinner, softer leaves, of a vivid red hue in contrast to the normal rigid, thick bright green foliage. The only suggested control is by hand picking the infested shoots, and burning.