YOSEMITE

NATURE NOTES



Skiing in Yosemite - December until May

Vol. xv1 December 1937 No. 12

Yosemite Nature Notes

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

Volume xvi

December 1937

Number 12

A Toast to the Field School

By Mrs. H. J. Taylor

(Upon the occasion of the Staff and School annual picnic August 6, 1937.)

The invitation to attend this banquet, unique in its setting and its personnel, is greatly appreciated. The Yosemite School of Field Natural History is a distinctive group; its essence is felt throughout our national parks; its value is far reaching. To be with you gives me the fee ing that I, too, belong to growing movement. this living There is inspiration in belonging. Cur rapidly developing national parks are bringing to thousands he insciration of belonging to a great movement.

Recently some of our leading educators expressed the urgent need for change in the curriculum of cur universities. The output is not enti ely satisfactory—indeed it is unsatisfactory. Among the thousands graduated each year, only a very small per cent belong to the

community, the state, the nation. This small percent is largely in scientific research; archaeology anthropology, study of soils and fossils, rocks and rivers. Reading the by-gone ages they have gained knowledge to understand the present and wisdom to foretell the future. These are our prophets and true conservationists. They belong to the world. For want of such China's, and even our own United States' hills'des were denuded of heir forests and resultant floods have taken uncounted lives. We call ourselves conservationists but our horizon of what constitutes conservation is very limited.

One of the great plant breeders of all time is spending his life developing the prairies of the Dakotas that cattle shall have feed and the people shall have fruits and flowers and happy lives. From the Steppes of Siberia, so like the Dakota prairies, he has gathered seeds

and plants; has developed alfalfa that sends its roots several feet into the soil and will not winter kill in temperatures twenty or thirty degrees below zero. The parent apricot found in Siberia has made it possible to grow this fruit in the Dakotas. He was called elsewhere at his own price. I asked when he was going. He looked at me in surprise and said, "Going? I'm not going. I can't go. I need fifty or a hundred years to develop this work." Professor Hansen feels the pulse throb of humanity. He belongs not only to the Dakotas but to the world.

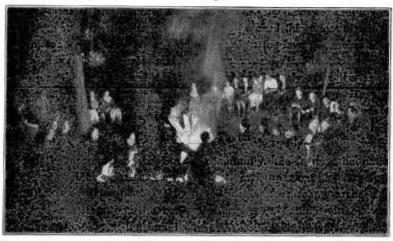
Recently I had as guests in my home two Blacks from the Gold Coast of Africa who had received their doctorates in agriculture chemistry and soil from the university at Berkeley. They love America. "Would you like to remain here?" I asked. They were radiant with joy as they said, "O, no! Education is coming to the Gold Coast and our people are beginning to feel that life is more than getting food to keep the body alive. We belong to these people and can help to make life better for them." These men feel the pulse throb of humanity. They belong not only to the Gold Coast of Africa but to the world.

Whether a change in the curriculum would change the vision of students toward the betterment of humanity I do not know. We do need more Clara Bartons, more Jane Addamses, and Dr. Grenfalls. The large majority of university graduates is content to live on its earnings, but does not belong to movements for human betterment. The joys of life lie beyond the satisfaction of good earnings.

A curriculum is needed as a guide but education that culminates in knowledge and wisdom comes from within. It is a very personal and individual matter Learning is not the aim—wa'king encyclopedias are neither interesting or very useful. There is a inmost center in each one of us where truth abounds; this is the root that must be set free if there is to be growth.

Acorns lie in vast numbers beneath the tree. Within the horny covering two cotyledons hold tightly in their clasp a tiny tree. It is the root of possibility. The horny covering must be broken; the roots must sink deep into the earth: leaves and branches must have warmth and sunshine. Rain and hail, snow and wind and storms will strengthen the branches and in due time the tree will belong to the great forest. Education comes from within. Truth lies deeply buried within us. It must be freed for growth. The elements that test the fiber and quality of growth are the experiences of life; its joys and sorrows; cares and responsibilities; all these are opportunities for the crown that is s'rength and peace. We belong to the state, the nation, or the world, little of or much, as

we feel the pulse throb of humanity and pour the expression of our lives into the current that slowly and uninterruptedly is moving toward a better civilization and a more abundant life for all humanity.



The Second Annabel

The Story of a Female Western Tanager

By Ranger Naturalist M. D. Bryant

"Pop" Bruce, the photographer at the Mariposa Grove of Big Trees, has been taking pictures in the Grove for so many years that he is almost as well known as his favorite subject, the Wawona Tree. He is to be found in an open area to the east of the tree every day throughout the summer awaiting the visitors to Yosemite who desire to have their pictures made while pa sing through "the tree with a hole in it." He took his first picture in 1901. In his spare time he has observed and made friends with the animals in the vicinity. While

talking to "Pop" recently (July 18, 1937) I was astonished when a female Western Tanager (Piranga ludoviciana) hopped upon his shoulder and peered up at him as if to say, "Where's my food?" I asked "Pop" about the bird and the following story came to light.

A number of years ago, about 1927, a female Western Tanager appeared at the old lodge in the Grove. She became so tame that she would enter the lodge and was the subject of much interest and attention. She was named Annabel. One day in July Anabel, not know-

ing the difference between the various furnishings of the lodge. came to rest on a stove. Her foot was so severely burned that the toes curled under and the foot made almost useless. However, she was able to take care of her young and to leave for the south with the other females about the middle of August. The males had gone about a week earlier, as is their custom. Annabel returned to the lodge in June 1928, about a week after the light-colored males had made their appearance. Soon after she was accidentally killed when a boy stepped on her as she was picking crumbs from the floor. So ends the story of the first Annabel.

A few days later a female with the reddish forehead of the male appeared at "Pop's" feeding grounds and immediately made friends. So begins our story of the second Annabel.



The second Annabel has two characteristics that definitely separate her from the other tanagers. The reddish forehead and her friendliness are distinctive. The Tanagers will often take food from a table in close proximity to people but they will seldom permit themselves to be held in the hand. An-

nabel started her migration in August of the year and reappeared at the Grove in June the following year. She probably spends the winter months on the Mexican plateau or in the mountains of Central America. Every year since 1929 Annabel has returned from the south between June 10 and June 15, making her presence known by abruptly perching on "Pop" shoulder. "Pop" now begins to look for her about five days after the males begin to make their appearance and is no longer surprised when Annabel shows up.

So far as is known Annabel's life has been beset by only one mishap. Each year she has gone about the business of rearing her family, building her nest, and incubating the eggs with but little assistance from the ma'e. The male helps with the feeding of the young in the nest and afterwards. One day in late July 1934, Annabel overcame her fear of other people and approached too close to a well-intentioned lady who decided to hold the bird in her hand. Annabel struggled free but left the tail feathers behind Rudderless Annabel had quite some difficulty flying for a time but later learned how to maintain her balance without the tail feathers. She managed to make the fall migration and returned in the spring with her full compliment of feathers. Since the day that the mishap occurred she has been a one-man bird. You may go to the Wawona

Tree today and marvel at the friendship between the bird and the man but think not for a moment that Annabel will come to you.

Several interesting conclusions may be drawn from the story. The Western Tanager attains an age of at least ten years. The males arrive here before the females and depart for the south ahead of the females and young. The birds can distinguish between people after an absence of nine months. Are these conclusions not indicative of an ability to recall past incidents and to profit by experience? Do they not show some reasoning power and perhaps intelligence?

NESTING OF THE WESTERN GOSHAWK IN YOSEMITE NATIONAL PARK

3 10

By Howard Twining

Twenty-two years ago Dr. Grinnell found a pair of Western Goshawks nesting at Ostrander Rocks, a little south of Glacier Point in Yo emite National Park, Since that time there has been no published record of nesting goshawks within the park boundary.

On July 16, 1937 Wilbur Twining and I were following the long Rancheria Ridge bordering the north side of upper Hetch Hetchy Lake. In the dense forest of red fir and jeffrey pine at about 9000 feet al-

titude, we heard a serie s of shrill ringing cries, occasionally answered by a series of similar calls at a lower pitch. We investigated, and found a grey breasted adult goshawk perched thirty feet above the ground in the lower branches of an enormous red fir. The bird was induced to fly only after ten or fifteen minutes of urging. He then flew with uncertain wingbeats to the top of a stump thirty feet high. During this flight the streaked breast and the broad grey band at the end of the tail, which are characteristic of a young goshawk, showed conspic ously. We also discovered that the bird was carrying a dead Hermit Thrush in its talons, indicating the part this species plays in limiting the bird population of the high mountains. The young bird was obviously not strong enough flier to capture the bird unassisted, so we assumed that the prey was brought to it by one of the parents.

Goshawks not uncommonly have been seen in the Yosemite region. James Dixon has observed their nesting activities at Mammoth, a bit outside the park boundary. Other nests have been found in the Tahoe region. The birds probably breed frequently within the park boundaries, but the nests are seldom found because of the inconspiciousness of the species, particularly during the nesting season.



The Lewisias of Yosemite

By Ranger-Naturalist Enid Michael

High up on the granite domes and ridges that overlook the Yosemite Valley bloom some of the first spring wild flowers. Among these are two beautiful species of Lewisia or Bitter Root. They are particular little plants and grow only in the fine granite sand where it has filtered into basins in the solid granite. With the melting of the snows in spring these basins fill with water and the Lewisias, whose fleshy dandelion-like roots are hidden in the sand, come to life. The Yosemite Lewisia (Lewisia vosemitana) blooms early. after the snow melts. Small green rosettes of rounded leaves, each leaf like a tiny fat finger, appear on the warm sand. And in a few days the flower buds expand their many rose colored petals into a saucer-shaped flower an inch across. These exquisite flowers with golden anthers appear to have been carved from wax. And the many blossoms, borne on short stems, seem to float above the pale granite of their basins like water lilies

floating in a pool. On the south shoulder of Half Dome, once early in June, I saw a half mile of these gardens in full bloom along the top of the ridge,

The Yosemite Lewisia was first collected by Mrs. W. F. Dodd and later named by Mrs. K. Brandegee Lewisia rediviva var. yosemitana. Ever since that first collection it has been playing hide and seek with the botanists. It is hard to catch up with this Yosemite Lewisia for its gardens are high above the valley floor and its blooming season is early and brief.

It is the large white flowered Lewisia kelloggii that is occasionally collected as it blooms when people are likely to be climbing the domes around the last of June or the first of July. Botanists have confused this species with the rose-colored Yosemite Lewisia. The two Lewisias are similiar in habit and appearance. The leaves, though of the white flowered species, are shaped like small spatules. The white flowers with petals that ap-

pear to have the texture of tissue paper, are an inch and one-half across. On El Capitan and the ridges east of El Capitan leading toward Eagle Peak, are many gardens of the lovely Kellogg Lewisia, It also occurs on Sentinel Dome and the sand flats near Coyote Creek on the Big Oak Flat Road.

Two dainty little Bitter-roots that favor moist situations are Lewisia nevadensis and Lewisia triphylla. Lewisia nevadensis is an attractive bouquet of leaves and flowers, the whole 1 to 4 inches tall. The leaves are narrow, thick and succulent and from 2 to 4 inches ong. The numerous saucershaped flowers about one-half inch across, are borne on reddish stems that are shorter than the leaves. This dainty white flowered lewisia may be found at the edge of dripping (now banks or in the moist meadow at altitudes of seven to eleven thousand feet. The whiteflowered Lewisia triphylla has two s ender leaves and betwixt them a cluster of small flowers. It is one of the plants that fringe the pools and rills of the bare granite slope. It grows in beds of moss with small vellow mimulus and dainty whiteflowered montia.

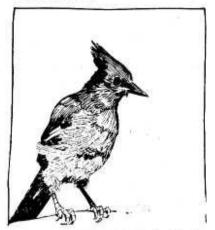
The fifth of our bitter-root group is a darling for the rock gardener. It is one of those Alpine plants that seems to have many more flowers than leaves and called by the botanist Lewisia pygmaea. The flowers are one-half to three-fourths inch

across and the petals, about seven in number, are supported by two broad sepals that are fringed with purple. At the base of the little plant is a cluster of fleshy leaves. The flowers are usually white but of a lovely specimen brought down from Mt. Dana to the garden by Mrs. Hood, the flowers were bright coral-pink. They occur on mountain passes and peaks at altitudes of 8,000 to 13,000 feet.

JAYS AS BATTERING-RAMS

By M. E. Beatty, Assistant Park Naturalist

Biue-fronted Jays are noted for their diversity of methods used in obtaining food. Yosemite visitors often praise them for their ability to thoroughly clean all insects from radiators.



Ranger Walter Sutherland who has been stationed at Gentry on the Big Oak Flat Road during the past summer reports a brand new technique. During the period when sugar pine cones were just starting to open while still on the tree. Blue-fronted Jays were observed flying at full speed after taking off from a nearby tree and purposely colliding with the cones. Their object was quite evident as the birds were then observed to hastily spiral downward catching a number of winged insects that had been jarred loose by their body impact, Sutherland further stated that the majority of seeds fell to the ground although the birds were able to get two or three while still in the air.

NATURE'S BALANCE

By

Ranger-Naturalist Lowell Adams

The "Balance of Nature" concept was nicely exemplified in a little natural drama which occurred one evening last spring just at dusk. The participants were two California Woodpeckers, about thirty batsapproximately twenty Little Brown Bats and ten Big Brown Bats-and dozens of unidentified insects. The latter seemed to be emerging from the bark of logs which constitute the front of the Lost Arrow Studio and proceeding on some nocturnal mirsion. However, not a one of of them was seemingly able to venture forth more than thirty feet before it was summarily eaten by a bat or one of the woodpeckers. The comedy was furnished by the two woodpeckers. One was on the scene as the drama began, perched upon the ridge pole of the building from which he made quick dashes out into the air after the insects in the typical flycatcher-like habit of this species and the back to his vantage point. Presently the second woodpecker arrived and prepared to sit in on the feast. But this was not at all to the first bird's liking and the chase began, Around and around they went and then disappeared over the roofs of the buildings only to reappear almost immediately and perch again in their respective places. Soon they were at it again. Finally the newcomer gave up, probably mumbling something about sour insects.

Here we have a good example of competition for survival between individuals of the same species. Eut, on the other hand, there seemed to be no conflict between the woodreckers and the bats for they each went about the'r business without seeming to pay any attent'on to the other. Indirectly, of course, there was competition without personal combat, for the bats were getting by far the larger share of the insects-both because there were more bats and because they worked more diligently than did the woodpeckers. And so the balance of nature is maintained and controlled by constant competition. Woodpeckers compete among themselves, bats compete with the woodpeckers and with each other and all join in the common cause of competing with the in ects.

