

Yosemite Nature Notes



VOL. XXIX

SEPTEMBER, 1950

NO. 9



Photo by Ralph Anderson

Left to right—Bottom row: Karlin, Alden, Overlease, Nelson, Osborn, Pitman. Middle row: Flock, Hunt, Loomis, Watts, Lytle, Neely, Moore. Top row: Elkins, Ernst, Bair, Wustenberg, Brown, Youngblood, Assistant Director Waldo.

ROSTER OF THE 1950 YOSEMITE FIELD SCHOOL

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Editor's Note: This number of Yosemite Nature Notes has been prepared by the 1950 class of the Yosemite Field School.

Yosemite Nature Notes

THE MONTHLY PUBLICATION OF
THE YOSEMITE NATURALIST DIVISION AND
THE YOSEMITE NATURAL HISTORY ASSOCIATION, INC.

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THE 1950 FIELD SCHOOL

By Phyllis Lytle, Field School, 1950

A national park is an elusive idea. Did you ever try to define one? The thought had never occurred to me before I came to the Yosemite Field School. A national park was a place to come to camp, to hike, to fish, to take a vacation. But, now, I have been warmed by the fire of discipleship, for a national park is more than that, and every American citizen should know it. This change in my attitude was not a simple thing although I was struck by its excitement early in our stay here. Field School is an experience in the true sense of the word. Perhaps the best way to express my conversion is to relate something of this "experience."

Theoretically we came to Field School to learn to interpret natural history and conservation to you, the public. Outwardly that is what we have done. In our first two weeks here we were given a whirlwind review of all the things a public servant should know, from the names of Yosemite snakes and flowers to fiscal management from first aid for hikers to wildlife survey and census. The third and fourth weeks were mainly turned over to public contact work, museum talks, information desk duty, Junior Nature School,

and along with that we learned the basic methods of museum management and library techniques in a national park. During our two weeks in the high country we covered a lot of territory, part of it on public walks and caravans, part under the guidance of Dr. Carl Sharsmith, Ranger Naturalist at Tuolumne Meadows. His name itself implies the superlative in training in all things—the history, natural and human of the Sierra Nevada; the fascinating details of research in the science of the mountains; the techniques of interesting the public in natural history and of managing nature walks, overnight hikes, and mountain climbs. Our last week, back in Yosemite Valley, was filled with activities in the museum, giving talks and working at the information desk, conducting nature walks, and presenting evening campfire programs at Camp 14.

But that is only what we did outwardly. It is the spirit of the park, the National Park Service, and the enthusiasm of the park men and women that make the Field School so much more than a school. It is national park; it is an interpretive workshop for the service and education of the public.

Cover Photo: Juniper, Upper Merced Canyon (Triple Peak Fork), Yosemite National Park.
By Ansel Adams from "Yosemite and the Sierra Nevada," text by John Muir, 64 photographs by Ansel Adams. Reproduction by kind permission of Houghton Mifflin Company.

As I said my "conversion" was aroused by a complex of many things. The first stage of my infection was, I think brought about by this enthusiasm of the directors of the Field School—Don McHenry, Harry Parker, Allen Waldo, and the others—all doing their utmost to encourage us, wanting almost desperately to make us and the Field School successful. Having just come from a university where the attitude was, "We'll dish it out and if they want it they can get it," it was most stimulating to have our leaders outdo themselves in their eagerness to make us eager. In the past seven weeks we Field Schoolers have witnessed time and again the love of their work that imbues National Park Service people. In purely mercenary terms, they spend many, many hours working on their own time without recompense. Much time is devoted to careful planning of programs, museum displays, park management, and in carrying out these plans. Every museum exhibit, every nature walk, every word and action

is aimed at arousing interest, curiosity, and pleasure in the visitor. And when evening comes they attend public or Field School campfires to add more fuel to their fires for conservation and inspiration.

What are the ideals that kindle these fires? What hopes and dreams overcome the normal human inertia against work that most people have? It is more than love of the out-of-doors, of nature untrammelled, or selfish desire to preserve the wilderness. It is a deep feeling for the need of all peoples to thrill to the inspiration, beauty, and fascination of nature; the need to feel an urge to serve God's earth and God's people. It may be summed up in the words: conservation, inspiration, education. But it is for us—the teachers, nature lovers, parents, museum directors—to introduce the public to the joys of "natural" living; we of the Field School call it communal living, co-operative living. At any rate it is a thrilling experience that will urge all who partake to share it.

SOME UNSCIENTIFIC NOTES

By William L. Neely, Field School, 1950

On these crowded vacation days we try to get the most out of them and are often filled to the ears with sightseeing. What strikes us is the obvious, the spectacular, the grand. When we go home what we remember with pleasure or nostalgia is often the inconspicuous, the ordinary, the simple. We gaze at the giant Sequoias and stand at their feet awestruck. We are shown the terrifying leap of a river over a thousand-foot cliff. These are what we tell people we saw; these are what we show in our snapshots. But what we often remember is a friendly pine or fir on a sunny slope where

we rested one day on a hike and gazed in peace up at the shimmering needles. Or we remember some unnamed little stream that bubbled through moss and stones, half hidden in greenness and shade where we took a drink of cold water.

These are common experiences; they don't require scientific training to recognize them. In fact, I wonder sometimes if a scientist sees what we see. We approach nature with a certain innocence and unlearned view and are ready for all impressions. The scientist must be cautious and cool in his observations. He can not bound into his field the way a

child runs happily into the meadow. But we can be poetic and subjective if we want, perhaps coming closer to nature than he does with all his formulae, mathematics, tabulated facts and Latin names, and doing so we can understand the mood and spirit of the great naturalists—Walt Whitman, for instance, when he heard the learned astronomer with all his proofs, figures ranged in columns, and was shown "the charts and diagrams to add, divide and measure . . .":

How soon unaccountable
I became tired and sick,
Till rising and gliding out
I wander'd off by myself,
In the mystical moist night-air,
and from time to time,
Look'd up in perfect silence at the stars.

A naturalist has to be more than a scientist, although he must draw much from science and use many of its methods so that he doesn't become too sentimental, too effusive, and too jump-to-conclusion-ish. A jump to a conclusion may carry one past much interesting country.

Yet, learning Latin names and facts for themselves brings us not a hair's breadth closer to nature. Said Thoreau: "To conceive [a natural object] with a total apprehension I must for thousandth time approach it as something totally strange. If you would make acquaintance with the ferns you must forget your botany"

The naturalist gets more from nature than facts. He derives understanding. He learns not only what bears eat, but understands the hunger of the bear. Thus from understanding comes compassion. Understanding compassionately the hunger of the bear who steals his bacon he achieves serenity. And isn't serenity the thing we come to the mountains to find?

Thus many of the moments we remember so well are those rare moments of complete serenity. Dr. Lin Yutang in his *importance of living* mentions an old Chinese who listed thirty-three moments of happiness, adding after each one, "ah, is this not happiness?" In the same manner here is my list:

1. Lying in the short grass of an alpine meadow near Vogelsang, tired from hiking with a heavy pack up the mountain, I watch the tail-end of a rainstorm go by with a sky full of drifting clouds; ah, is this not happiness?

2. The rain and mists hide the face of Mt. Lyell and cover the glacier. We are cold and wet by our windy camp. Then the mists blow aside and reveal the glacier, half hidden, and the peak, black and wonderful, touched with new snow crystals; ah, is this not happiness?

3. To wander in a sub-alpine region of jagged rocks and cliffs and to find a group of mountain hemlocks rising from the chaos with languid grace, drooping tops and graceful branches: Ah, is this not happiness?

4. To tell a ranger about a very unusual flower you found. He says, "Oh, yes, that is very common up here." And you feel crushed, but you show it to him anyhow, and he exclaims, "Why, that is a new species for this area! Where did you find it?" Ah, is this not happiness?

5. To find a mosquito on your arm full to bursting with your blood and you swat it; ah, is this not happiness?

6. The crowds flock to the river and fill it with their shouting and stir up the bottom. We find a small tributary that slides over glacier-worn granite and cascades into a swirling pool of limpid green water.

We swim in the bubbling water, then lie on the rocks, blinking in the sun like lizards; ah, is this not happiness?

7. We see two jays squabbling and squawking over a tidbit near camp. Then comes a flash of yellow and red and a tanager swoops down and grabs the prize; ah, is this not happiness?

8. To sit on a river bank in the afternoon and fish and smoke a pipe in perfect peace, then when evening comes and having caught nothing, to walk singing back to camp; ah, is this not happiness?

9. A long, hot day with dust in the camp. Then over the mountain clouds form and thunder rolls above the Valley. You sit in your tent and hear the rain patter on the canvas; ah, is this not happiness?

10. You meet a conceited camper who knows all about the mountains, who tells you what is wrong with your equipment and how your camp should be fixed. Then the next morning you learn that his bacon was taken by the bears: ah, is this not happiness?

11. To travel over the old Tioga Road in no hurry at all; ah, is this not happiness?

12. To stand on the mountain crest facing into the fierce wind and hearing the mountain gods roaring and to feel strength in your legs and bones; ah, is this not happiness?

13. After looking at the ancient grandeur of the Sequoias you turn and see a young one growing full of vigor and assurance, scarcely as

old as you are: ah, is this not happiness?

14. To go out into the meadow and see the grass waving in the breeze, to see a young fawn stick its head out of a clump of ferns, to smell the pine needles on a warm day; ah, is this not happiness?

15. To pass on by the newspaper stand in the Old Village without looking and buy an ice cream cone instead; ah, is this not happiness?

16. After a long, long time in the city you take out your slides and photographs of Yosemite and show them to friends; ah, is this not happiness? Or is it sadness?

Some of the beauty of John Muir's writing is the joy he found in ordinary experience, in little things. The atmosphere in the mountains can turn the tiniest moments into gold. Impressions come and go, like clouds. How can we add together the thousand moments of a day and form them into a clear picture? Hiking along the trail our thoughts become as scattered as grazing sheep—they range and forage over the landscape, nibbling experience here and there.

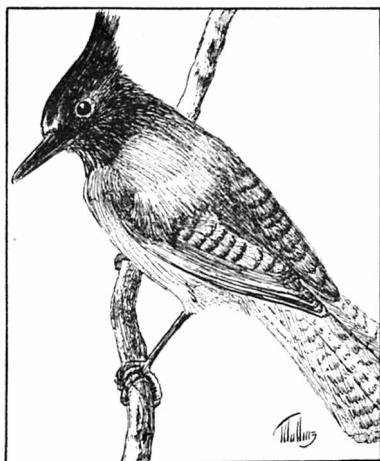
Every now and then I must wake up and realize that I am here. Then it comes with a pain that all this is a transient experience. Perhaps the pleasantest part is the peaceful forgetfulness one falls into. Past regrets and future fears are like fluttering leaf shadows and floating clouds. Life here is one flowing, unbroken present moment as placid as the Merced River in late summer.

JAY TALK

By Don Wustenberg, Field School, 1950

The bird most likely to come to one's attention when first taking a walk in Yosemite Valley is the blue-

fronted jay (*Cyanocitta stelleri frontalis*). Seemingly no matter which little portion of the Valley one



Blue-fronted Jay

chooses to explore, there is at least one member of this self-appointed welcoming committee to mark the arrival with a series of raucous calls. These are very often uttered in flight as a long glide carries the local crier from the top of one tall tree down into another some distance away. Or they may be given nearby while hopping upward spirally from branch to branch around the trunk of a conifer.

Such a sight never fails to make me feel at home again after a long absence from the mountains. However, in attempting to make observations afield this has its obvious disadvantages, for along with telling me that I am in the mountains again, it also tells all the other creatures. The more timid ones are quick to heed the warning that there is a stranger in the woods.

The fact that these birds are so much before the eye does nothing to lessen the admiration I have for the very competent and varied way in which they are able to gain a living from their surroundings. As one walks through Sentinel Meadow blackbirds of more than one kind are often seen. One expects to find

them in moist, sedge-filled meadows for such a place is their home. However, it is also a perfectly common sight to see several blue-fronted jays in such habitat hopping around after grasshoppers. From the same spot in the meadow many California woodpeckers can be seen in the numerous dead black cottonwoods along the Merced River. I have long been familiar with the way these birds will dart up into the air after insects. It was amusing to observe a blue-fronted jay doing just this from high up in one of these dead trees. I paused long enough to see the jay make what appeared to be three successful round trips. Although these trips did not include the fancy dive and flap-and-glide maneuvers of the woodpecker they impressed me as being quite adequate for one whose habits are so varied.

As a connoisseur of the campgrounds the blue-fronted jay has few rivals here in the Valley. It adapts very quickly to the presence of men in droves in making use of their generosity, carelessness, and garbage as sources of food. In other parts of the State where I have known the jay to be frequently hunted they become equally adept at remaining inconspicuous until a safe distance away. Of course as soon as the distance is considered a safe one the alarm is sounded as usual. These and many other characteristics indicate a remarkable adaptability that is more or less common to all the members of the crow-jay family that I know.

I have mentioned the jay's willingness to accept food donations. An episode concerning this took place as my tentmate and I ate our noon meal at Camp 19 one day. As usual several jays were perched in the

trees around our table eyeing our bountiful food supply with a never-ending stream of rasping comments. As we tossed a few bread crumbs to them they would hop downward from limb to limb and finally to the ground. Then with a crumb secured, the nearest tree served as a spiral stairway up off the ground. They seemed to stay on the ground no longer than necessary. One parent made three trips up to one of its offspring that was fully as large as itself. On the fourth trip the crumb

was not delivered to the young one as usual. The parent retreated from the eager advances of the young jay and continued to do so until the now very excited youth found itself on the ground in the vicinity of the crumbs. As soon as it began to show interest in them the mother vanished to a distance of some hundred feet. This episode ended with the youthful member of the cast hopping spirally up a tree with a white bread crumb in its bill just as its parent had done earlier.

WILDERNESS WOODCUTTER

By L. D. Moore, Field School, 1950

On Sunday, August 6, my attention was called to a pair of western pileated woodpeckers (*Ceophloeus pileatus picinus*) which were feeding in some dead snags at Camp 19. This is the largest woodpecker in California, being from 17 to 18 inches in length. At first glance it resembles a huge Modoc woodpecker (*Dryobates villosus orius*), but closer inspection readily reveals the difference in markings. The entire top of the head of the pileated woodpecker has a crest of red feathers (hence the name), and in contrast with other woodpeckers the head and neck of the pileated woodpecker are very slim, having an almost snaky appearance. This is further accentuated by the long, pointed beak.

When first observed its actions were similar to those of any woodpecker, but upon closer examination the birds were seen to hop backwards on the limb, as much as four inches to the hop, to a new feeding spot. To my knowledge this is the only woodpecker which can maneuver itself in this manner.

The most interesting feature of the

birds' action was their manner of pecking on the limb to get food. Most woodpeckers are content just to peck a hole to get at the insects which live in the dead wood. The pileated woodpecker goes at its food-getting much the same as a woodcutter chops wood. First, several pecks are made straight down in a most orthodox manner, seemingly in order to loosen the chunk of wood or bark. The bird then delivers several strokes with its beak at an angle to the first attack, thus making a wedge-shaped cut in the wood. As it makes these slashing strokes it gives a twisting motion to its head that pries the chips off. A great deal of power must be exerted in this method of pecking, as I observed large chunks of bark and wood flying through the air, some as much as three feet from the original point of attachment. After the birds had flown from the area I picked up some of the pieces and found them to be as much as two inches square. The size of these chunks is in itself a testimony to the skill of our wilderness woodcutter, the western pileated woodpecker.

NEW FIND OF THE FAIRY SHRIMP

By Claude Flock, Field School, 1950

The fairy shrimp (*Streptocephalus scalii*) was found again on July 28, this time while the Field Schoolers were on a general nature walk in the Gaylor Lakes area near Tioga Pass, led by Ranger Naturalist Dick Robinson. Although reported by Gerhard Bakker of the 1941 Field School,¹ the fairy shrimp is still one of the lesser known animals of Yosemite National Park. Only a few of the Field Schoolers and none of the other people on our walk had ever seen anything like them before.

Several persons exclaimed, "What are they?" as they looked into the water of the shallow pond. Swarms of fairy shrimp could be seen. Other minute crustaceans were present, including numerous copepods and *Daphnia*, but these soon lost interest to the larger fairy shrimp.

Soon many were scooped out and examined more closely. Someone noticed that they swam upside down and that their many feet moved in a wavy fashion from head to tail. It was a member of the Field School who identified them and told the group something about their habits. They not only swim with their many legs but also breathe and direct food into their mouths with them. Present on the legs are respiratory organs which contain many tiny blood vessels through which the oxygen of the water easily enters and the blood's carbon dioxide is gotten rid

of. The currents of water set up by the waving feet seem to direct food, consisting of microscopic animals and plants, into the shrimp's mouth continuously.



G. Bakker

Male Fairy Shrimp, four times life size.

The pond in which they were living looked as if it would dry up in a few weeks. How could these little animals live in such a temporary place, subject to the low temperatures of an elevation above 10,000 feet?

The question was partially answered, at least, when it was pointed out that the shallow water would warm up quickly during the day and thus allow for some rapid growth. And the problem of the pond's drying up apparently isn't serious to the creature. The eggs resting over from one season to the next are very resistant to drying and freezing. John Y. Beaty, in his book *Nature is Stranger than Fiction*, tells of some fairy shrimp eggs placed in mud which was allowed to dry and then kept for 14 years. Then the eggs were put in cold water and promptly hatched as though they had been laid only a few months before.

EDITOR'S NOTE

The lateness in publication of recent issues of Yosemite Nature Notes has been due primarily to unusually heavy demands on the editorial staff's time by the increased visitor use of the summer interpretive facilities, by a temporary loss of stenographic service, and by unforeseen special assignments. It is expected that a return to the normal schedule of publication will be made with the November issue.

1. Yosemite Nature Notes 20:104. 1941.

COOKING AND CAMP ROUTINE FOR LARGE GROUPS IN THE MOUNTAINS

By Sam W. Elkins, Field School, 1950

One of the high points of Field School experience is the twelve-day period spent in the Yosemite high country. It has been the custom on such trips for the class to travel as a body, pool all its resources, buy all its food before leaving, and to carry out all general camp activities as a unit.

This year our Field School group, together with leaders plus an occasional visitor, averaged about 22 or 23 people. This was not a large group, but was large enough so that we had to do some careful planning as to kinds and amounts of food to be taken. It was also necessary to set up some sort of an agreement on how the routine camp chores were to be performed so that each member carried his proper share of the load.

I think the Field Schoolers this year are unanimous in agreeing that things worked out exceptionally well. There was plenty of good food, and we were fortunate to have the services of two excellent people for the cooking, Betty Willard and Barbara Cross. These two girls are responsible for working out most of the menus as herein presented, and they did a marvelous job preparing the foods listed.

Almost all the foods were purchased before we left Yosemite Valley. It would seem that anyone could do as we did and have a 10-15% reduction of the total cost when purchasing in such large quantities.

Our meals were planned in such

a way that we had hot prepared foods for breakfast and dinner, but the lunches were of a type—called trail lunches—which we could easily carry with us and eat wherever we happened to be. They were the ultimate in simplicity, yet were planned to be completely satisfying both nutritionally and quantitatively. These trail lunches consisted of peanuts, raisins, a wedge of cheese, eight or ten salted crackers, and some sort of dried fruit—apricots, peaches, apples, or prunes. For dessert there was a two-ounce square of a kind of chocolate, such as Ghirardelli's Semi-sweet, that does not melt easily. We also took along some dried figs and dates as an occasional treat. These foods were conveniently carried in a small bag or a sock tied to one's belt.

Breakfast was also planned for maximum simplicity with an ample supply of warming, high-energy foods. Each morning we had some type of cooked fruit made from dried fruit products. We also had some sort of hot cereal. Sometimes this comprised the complete breakfast, but about on alternate days we had additional servings of pancakes and bacon. We used powdered milk both for the cereal and to make hot chocolate, which was a welcome addition to almost all the breakfasts.

Our dinners were the most elaborate meal of the day. We were usually tired and hungry and sometimes cold, and I must say these meals satisfied us on all counts. The following is a brief summary of our dinner menus:

I	II	III
Combination vegetable salad	Split pea soup	Mulligan stew
Meat loaf	Macaroni and cheese	Mashed potatoes
Mashed potatoes	Butterscotch pudding	Coleslaw
Canned peaches		Tapioca pudding
IV	V	VI
Tossed salad	Tomato-vegetable soup	Coleslaw
Spaghetti and meat balls	Creamed tuna	Chili beans
Canned plums	Boiled rice	Canned cherries
	Canned peas	Cookies
	Mixed fruit	
VII	VIII	IX
Chicken-noodle soup	Creamed noodle soup	Creamed potato soup
Creamed dried beef	Corned beef and cabbage	Creamed tuna
Mashed potatoes	Mashed potatoes	Rice
Chocolate-tapioca pudding	Canned blackberries	Sliced pineapple
X	XI	XII
Corned beef hash	Bouillon	Tamale pie
Carrots	Lima beans and salt pork	Coleslaw
Bouillon	Coleslaw	Applesauce
Stewed fruit	Orange-tapioca pudding	Pineapple-cocoanut pudding
Cocoa		

In all cases where possible we used dried or dehydrated foods. Mashed potatoes made by adding hot water or milk to the mixture, dehydrated soups, rice that cooks in four or five minutes, and pudding mixes are all very useful. For drinks we usually had tea, but coffee and/or bouillon should also be available. Probably it is most economical to use coffee in the powdered form. From the standpoint of economy it might be well here to point out the rather surprising fact that the total cost to each Field Schooler for the food described above was approximately 36c per meal, or a grand total of \$13.20 for the twelve days!

Our organization for camp chores was also particularly efficient. We divided ourselves into four groups of five people each. Each work group was given the responsibility for doing the chores for a certain meal. In our case it operated so that each group had a dinner and the following breakfast to take care of on three different occasions. In this way there was never any doubt as to who was

expected to work and who was excused. Also, the individual members of the group had some choice in deciding among themselves who was to do what job. For one meal a member might help the cooks, wash dishes after another, chop wood for another, or if he preferred he might chop wood on all three occasions without too much objection from the other members of his group.

Cooking over an open fire may be dirty and smoky but it is by far the fastest method of getting things done. Large kettles of water can be brought to a rolling boil in ten to fifteen minutes, when it might take much longer on a gasoline stove. A scouring pad and a little elbow grease from one of the members of the work crew seemed able to do wonders with the dirt on the outside of a pot anyway . . . but it will take a lot more than a scouring pad to remove the memories of the twelve delightful days we spent working, playing, and eating together while the Field School was in "the Meadows."

DIGEST OF THE PURPOSES OF THE
YOSEMITE
NATURAL HISTORY
ASSOCIATION

Yosemite National Park, California

INCORPORATED for the purpose of cooperating with the National Park Service by assisting the Naturalist Department of Yosemite National Park in the development of a broad public understanding of the geology, plant and animal life, history, Indians and related interests in Yosemite National Park and nearby regions. It aids in the development of the Yosemite Museum and library, fosters scientific investigations along lines of greatest popular interest, offers books on natural history applicable to this area for sale to the public, and cooperates in the publication of

Yosemite Nature Notes
\$1.00 per year

Subscription includes all
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