# YOSEMITE NATURE NOTES

## PORTER TO MEETE V BY THE HATIOTAL PASK SERVICE

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W. B. Lewis, Superintendent

Ansel F. Hall, Chief Naturalist

## NATURE GUIDE ACCOMPANIES SIERRA CLUB

During the first week of its extended trip through the northern part of Yosemite National Park, the Sierra Club was furnished a nature guide by the Yosemite Nature Guide Service. Interest was keen, and the guide was kept busy answering questions and conducting field excursions. At Grizzly Meadows eight bird's nests were located including those of the Williamson Sapsucker, Audubon Warbler and Lincoln Sparrow. In and around Pate Valley wonderful gardens of wild flowers made botanizing popular. A fawn but a few days old was discovered and studied by more than forty Sierra Club members. Rainbow trout were studied to great advantage by the anglers of the crowd. Among the more interesting specimens exhibited in camp were the Coral Mushroom, an inhabitant of Red Fir forests; the Steer's Head, a rare alpine plant; a Ringrecked Snake, small but beautifully colored; a Gordius Worm, the "horsehair snake" of the small boy and parasitic in insects; a larval Mayfly; and a rare predatory insect. Symphasis Signata, which looks like a Yellowjacket but has forelegs like a Praying Mantis. Campfire talks emphasized the enjoyment to be gained by knowing and studying the living things to be found along the trailside. It was evident that many were stimulated to more widely utilize their eyes, ears, and noses and thus were led to more greatly enjoy their vacation trip.

#### THE LEVEL FLOOR OF YOSEMITE VALLEY

Twenty thousand years ago as the last glacier melted back from Yosemite Valley a terminal moraine, or dam of rock debris, was deposited just below El Capitan. This moraine, the top of which still extends about fifteen feet above the ground level and parallel to the El Capitan Road as it crosses the Valley, impounded a lake that extended six miles eastward to the base of Half Dome. It was the filling of this glacial lake that caused the present level character of the Yosemite floor and makes it such a pleasant place to live. By plotting the profile of the canyon walls and carrying out the curves we find that Lake Yosemite had a maximum depth of about 250 feet.

#### THE TWO DAY NATURE TRIP

The Nature Guide Field Trip along the Pohono Trail was a success in every way. The party easily ascended the Ledge Trail, enjoying the birds and flowers on the way. The shaded canyon on the upper end of the trail is arrayed in spring time beauty. While broakfasting on the verance, many of the members of the party onjoyed a visit with the birds and animals that come there in a friendly spirit to beg crumbs from the tables.

Soon after breakfast the party started along the Poliono Trail. Spring is just arriving in the open meadows and shaded woods, and many freshly bloomed flowers were enjoyed. Birds and deer were frequently seen, but the

big event of the trip was the unusual sight of a mother bear with three cubs. Another trip along the Pohono Trail will be offered by the Nature Guide Service in the near future.

## BIRDS THAT FEED IN THE AIR

For the first time since bird records have been kept in Yosemite the Violet-green Swallow nested on the floor of the Valley. This is the only representative of the tribe to be found in Yosemite, and by many it is considered the most beautiful of all swallows. Violet-green Swallows often perch on a dead branch of their nesting-tree, but they do all of their feeding in the air. With wide-open mouths, they comb the air, taking mosquitoes and other small, winged insects.

With the Violet-green Swallow, but usually flying higher, are to be seen the White-throated Swifts. Swifts are often confused with swallows. It is true that they have the same feeding habits, but, really they do not look much alike. The wings of the swift are narrow and pointed, and in silhouette, when sailing overhead, the bird resembles a crossbow. The wings of the swallow are broad, and in flight they flutter rather than twinkle, as do the wings of the swifts. The swifts nest in suitable cracks in the walls about the Valley.

## INTERESTING HOUSE-BUILDERS IN THE STREAM.

Has your attention been attracted to strange little bundles of wood moving mysteriously on the bottom of a Yosemite stream or spring? Did you pick up one of the bundles and examine the bits of which it was made. If you did, you discovered that it was the home of a worm-like creature, which quickly pulled his head into the shelter of his "case". This naked little larva is white and soft except for his head and thorax, and he builds a house to protect himself from his enemies. He spins a silken thread and with it binds the bits of wood together. Then he lines the case with a soft bed of silk. Usually the case is free and is carried about as the larva wanders. These caddis-worms, as they are called, will transform into winged caddis-flies, which of course forsake their cases and their first home in the water and make short flights along the streams.

## BENEFICIAL HAWKS.

A family group of Sparrow Hawks has recently been noted in the Stone-man Meadow. At this season the birds deed almost exclusively on grasshoppers. In the particular family that is to be found in the Stoneman Meadow there is a division of labor. The male bird attends to the feeding of one bird, while the female attempts to satisfy the appetite of another. Sparrow Hawks are beautiful birds and unlike the other small hawks to be found in the Valley they have no so-called bad habits — that is they are not bird-eating hawks.

#### ABILITY OF TROUT TO RECOVER FROM WOUNDS

There has been considerable argument between sportsmen and game conservationists as to whether undersized trout injured by hooking can be expected to live if returned to the water. Recently a Yosemite angler caught a six-inch took leven Trout that had suffered a peculiar injury. Apparently the fish had been snagged and returned to the river. A deep wound had been inflicted; the body cavity, walls, and intestinal tract were completely severed between the anal opening and the pelvic (last pair) fins. The wound had healed nicely, leaving a deep V-shaped notch on the under surface. The most remarkable thing in the happening was the forward migration of the vent or anal opening. The term intestine had found a new opening to the outside, at a point immediately behind the pelvic fins.

## MIGRATION OF AUDUBON WARBLERS.

In the early spring Audubon Warblers come into the Valley in vast numbers. They are abundant for a month or more and then most of them move to higher altitudes. Straggling pairs remain and nest about the Valley. It is believed that Audobon Warblers are the only birds that habitually use the Valley as a migratory route to the higher mountains.

## ANTS THAT MAKE SAWDUST

Along many of the old fallen logs one often sees small piles of saw-dust. This is the work of the large black ants, who live a social life, excavating tunnels in the old wood. In a colony there are always at least three kinds of individuals; the winged males, which die after swarming and mating; the winged females or queens, which pull off their wings after swarming; and the wingless workers. Winged ants are seen only at swarming times when new colonies are established.

## YOSEMITE VIOLETS.

The Yosemite Valley has five species of violet. All are early bloomers, and during the first weeks of spring the blossoms of all five may be found if one but knows where and how to seek them. One yellow one is found only in the bogs. Another yellow one chooses the dry, sandy stretches under the pines, and the third yellow one is found on the rock slides in certain shady nooks. The Blue Viclet and the White Violet are found in the moist meadows. Unlike the other violets of the Valley, the White Violet has a long period of bloom. It may be found as late as the end of August in certain favored meadows.

#### THE PACIFIC TREE-TOAD

Amphibians are not very noticeable in Yosemite at this season. However, campers sometimes discover little midget "toads" about their water hydrants and question the nature guides as to their identity. They are young Facific Tree-toads, recently transformed from swimming tadpoles. In the spring the adult females deposit eggs in the pends of the meadows. The eggs hatch into tiny "pelly-wegs" that swim about in their pend habitat, slewly growing and acquiring hind legs. Then come fore legs, and the animal is prepared to leave the water. The tail is absorbed, and the gills of course are replaced by lungs. It is this metamorphosis in the life history of the frogs, toads, and salamanders that gives the name Amphibia (both-life; i.e. lives in water and on land) to the group to which these animals belong.

