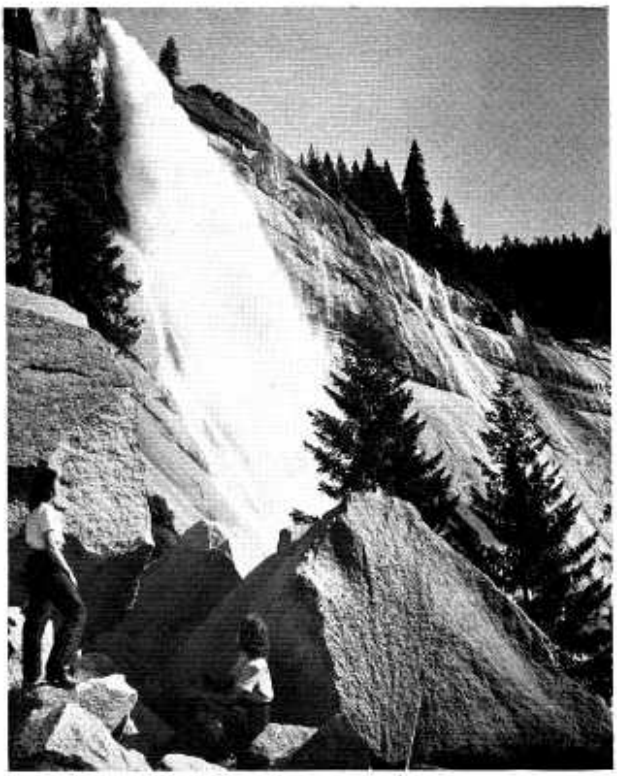
YOSEMITE NATURE NOTES

Vol. XXI June, 1942 No. 6



Yosemite Nature Notes

THE MONTHLY PUBLICATION OF
THE YOSEMITE NATURALIST DEPARTMENT
AND THE YOSEMITE NATURAL HISTORY ASSOCIATION

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A PORCUPINE MISCALCULATES

By C. Frank Brockman, Park Naturalist

The phlegmatic porcupine, usually safe and secure in the protection afforded by the defensive armament of its bristling quills, occasionally runs afoul of an unexpected situation. The result of such a smug miscalculation was observed last March while on a snow gauging trip to Tuolumne Meadows. Just beyond Tenaya Lake the hide of one of these animals was discovered lying upon the snow. It had been stripped, quite neatly, from the victim's body, and judging from its fresh appearance, the deed had occurred but a short time before. No further trace of any other portion of the carcass could be found, and the whole effect could be likened to that of peeling a banana, eating the fruit, and tossing the skin carelessly aside.

Recognizing the formidable obstacles that would naturally work against such an attack, an examination of the surrounding area was made in order that our curiosity could be satisfied as to the manner in which such an event could be successfully consummated. Coyote tracks were numerous in the snow, so it was not difficult to determine the perpetrator of the affair. It had apparently surprised the porcupine while the latter was in a small lodgepole pine, somewhat less than six inches in diameter and of insufficient height to provide maximum security. After harassing his prospective prey, which was just out of reach, in an effort to dislodge him, the coyote, with the cunning of its breed, temporarily abandoned its efforts and retired to a spot a short distance away from which any change in the situation could be readily observed.

Near-by was a larger pine, which, providing it could be safely reached, would give adequate refuge. Eventually, it was to this spot that the porcupine directed its attention. Undoubtedly, as soon as it reached the ground it was immediately set upon by the coyote which had probably been anticipating such a move. Quite a struggle had ensued for a large depression in the snow, about two feet deep and several feet in diameter, served as the proverbial "X" to mark the spot. The coyote, undoubtedly driven to extremes by hunger, had been little concerned

with the finesse of the attack or the effects upon its own person of such a furious assault. It is unlikely that it escaped unscathed. In the fury of such an encounter with such a formidably armed adversary as the porcupine the attacker would certainly pay a prodigious price for victory. Yet in this case the armor which nature had so graciously bestowed upon the porcupine and upon which it so smugly relies upon for protection did not serve to prevent its being overpowered or out-maneuvered and killed. The attacker had then culminated the success of its onslaught by literally skinning the carcass before carrying it off to some favored spot to enjoy the fruits of its victory, and perhaps to nurse

the wounds by which it had paid for its success.

NEW RECORDS OF THE MOUNT LYELL SALAMANDER

By Ranger-Naturalist Willis A. Evans

On the last all-day hike of the season to Glacier Point, August 27, 1941, our group had the good fortune of finding a Mount Lyell Salamander. It was crawling among moss-covered rocks by the margin of Staircase Creek, a short distance below Glacier Point. Very few records have been obtained which aid in revealing the true distribution of this amphibian, and only occasionally is one found at such a low elevation.

Associate Park Naturalist Beatty exceeded this occurrence, however, earlier in the season by finding a specimen on July 9, 1941, between the first and second Cathedral Rocks, better known to some as the Gun sight. This is, undoubtedly, the lowest elevation (4600 feet) at which the Mount Lyell Salamander has been found.

At one time this salamander was considered a great rarity, originally recorded only from Mount Lyell. From time to time records have drifted in until to date specimens have been taken from Sonora Pass on the north to Silliman Gap, in Sequoia National Park, on the south. Most of the specimens in the Yosemite Museum were captured on top of Half Dome.

A CUB BEAR STICKS ITS NECK "IN" TOO FAR

By Elizabeth H. Godfrey, Museum Secretary

In attempting to steal food from their human associates, bears often have to pay a penalty as does any other kind of robber. If they become too troublesome, they are often trapped and transported to more remote, uninhabited areas of the park. Then there is that strange boomerang of fate which animals sometimes experience as though in consequence of an unwise act. For example, there was the case, this last April, 1942, of the yearling cub bear that placed itself in a most outlandish predicament, and suffered what mental and physical torture no one will ever know.

In order to reach a few drops of milk, this bear thrust its head into the narrow bottle-neck top of a five-gallon milk can, and then was unable to pull it out. Running around blindly, bumping into rocks and trees with a milk can encasing its head and neck, the bear attracted the attention of Mr. Frank Culver, a local Yosemite resident, who immediately reported the facts to the ranger department. Ranger Vern Lowery was the first one to come to the bear's rescue.

After roping the cub and tying it to a tree, Ranger Lowery shot a hole in the bottom of the can with his .45 so as to provide air for the unfortunate animal. The bullet, however, did not go through on the other side of the can, and rattled around distractingly each time the bear jerked its head.

At the request of Superintendent Kittredge, Mechanic Dave Hendricks brought a cold chisel and other necessary tools from the machine shop to remove the milk can. To do this, it was necessary to place the cub on its back and to rope it down. A rope was tied to each leg, and the other ends held by four individuals who had gathered to assist. Mechanic Hendricks then cut the top of the milk can open with the cold chisel. After bending back the cut edges with pliers, the bear was freed of its milk-can helmet, and the ropes simultaneously removed.

A number of excellent Kodachrome slides and movies were taken of the yearling cub as it moved about in its wierd milk-can

headgear. Other pictures were taken just after the milk can was removed, and show the bear making a hasty getaway. These will doubtlessly serve as an exciting note in future naturalist lectures having to do with the springtime capers of the bears.

MAY MORNINGS IN THE MUSEUM GARDEN

By Ranger-Naturalist Enid Michael

As I arrived at the Museum Wildflower Garden on the 14th of May, an unfamiliar melody of laughing notes caught my attention. After looking around, I gasped with delight as I suddenly detected the singer—a trim little Lincoln Sparrow working among the nemophila plants near a Coffee Berry bush—for here was a very rare visitor in the wildflower garden. It is a jaunty little bird with a cocky tilt to its reddish brown tail. To watch it put back its head and to hear the gurgle of merry notes that bubbled forth was indeed enchanting entertainment.

Under my arm was the box of bird food salvaged from the men's mess. Breaking up a piece of bread in my hand, I tossed the crumbs toward our visitor. Shyly the Lincoln Sparrow approached from the shadows at the back of the bush, and daintily picked up a few crumbs, glancing at me from time to time with its round dark eye. In size the Lincoln Sparrow is slightly smaller than a Song Sparrow. Its color is mostly grey, but rusty brown feathers streak back over the crown, and this color is more or less prominent on the wings. A dark line from the eye and two or three dark penciled lines on the side of its head are distinguishing, as is the dark spot below the delicate penciling of its light buffy grey breast. But best of all is the merry song that gurgles forth in minute or two intervals.

The Coffee Berry bush at the back door of the museum is a famous gathering place for many birds of the Yosemite Valley district. Here, a free lunch counter has been maintained for many years. There are regular bird boarders that pour through the branches of the bushes as numerous as chickens, and when a new bird shows up it is an occasion of great excitement for the human observers. Another such interesting guest at the bird feeding table, arriving just the morning before the Lincoln Sparrow's visit, was a Green-tailed Towhee — a handsome male in full plumage. Its trim grey shape and the metallic green of his outer wing feathers and tail, together with the flaming red of its erected crest, were truly captivating. Another charm was the pure white patch on his throat.

In addition to the birds in the garden there are always displays of wildflowers in season. During May, 1942, the wildflowers certainly held

up bravely under adversity. On the first of May the whole garden was blanketed with fresh snow, and a week later it was completely covered again. Of course, snow at the proper season is the greatest blessing that can come to the wildflowers of the Sierra Nevada. But when snow descends upon fresh blossoms the effect, to say the least, is disheartening. After the snow had melted the broad beds of nemophila were flattened out and lovely clusters of rose-red Bleeding Heart hung on limp stems. I gazed at them with a sick heart, fearing the worst. Little did I realize their fortitude, for on the following day both the Blue and Spotted Nemophila had straightened up, just as gay as ever, and even

the Bleeding Heart had lifted its head.

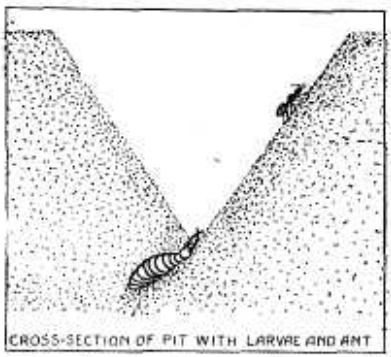
THE ANT-LION

By Sherman Hansen, Field School, 1941

One of the most interesting little creatures of the insect order Neuroptera, is the ant-lion, sometimes known as the doodle bug. Almost anywhere along the roads and trails of Yosemite National Park, in sandy places, one can see the characteristic pit or trap which they use to catch their food — usually ants; hence, it has been given the name ant-lion. On the Research Reserve area at Swamp Lake these insects were very common. Often we found them living in colonies having as many as ten or twelve funnel-shaped dens arranged closely together in one area.

The body of the larva is oval in shape, the head protruding in front and equipped with long, sickle-like jaws. When placed upon the ground it always moves backward, retreating into the sand. The pit or den in which the larval form of ant-lion lives is made by its flipping away the sand with a quick snap of the head. This throws the sand some distance, making a funnel-shaped depression with sides sloping inward at an angle, which permits easy sliding of the sand. The pits are usually about an inch to an inch and one-half deep, and about the same distance across the top. Ants or other insects wandering too close to the edge start a landslide of loose sand and down they go into the bottom of the pit where the ant-lion

is waiting under the sand to suck the body juices from it with its sharp-pointed, hollow jaws. Several insects were placed in these pits to observe the actions of the larva. At the first sign of disturbance in the funnel, the larva would flip the sand to keep the insect sliding until it could be caught. Even when the sand was slightly disturbed by dropping a tiny pebble into the pit, the lion would reach out thinking an insect had fallen into his lair.



CROSS-SECTION OF PIT WITH LARVAE AND ANT

After the larva pupates and the adult emerges from the cocoon in the bottom of the pit, the rest of its life as an adult is spent above ground as a winged insect. When the adult emerges from the cocoon it is a rather frail and dainty insect with four wings. It is a poor flier and does not spend much time on the wing. It lays its eggs in the sand. No eggs were found, but one adult ant-lion was collected and placed in the insect collection at the Yosemite National Park Museum.

NATURE NOTELETS

By

Ranger-Naturalist James R. Sweeney

During a roughing hike up to Tenaya Canyon we noticed a number of large Douglas-fir trees. These trees merited considerable attention because of their great size. It was not possible to determine the exact height, but I would estimate that the trees were nearly 200 feet high. The largest specimen that we measured was 26 feet in circumference and the diameter would measure about 8 feet. We measured 12 of the larger trees, and our measurements varied from 19 feet in circumference for the smallest to 26 feet for the largest. They are the best examples of mature Douglas-fir that I have seen in Yosemite National Park. However, farther north in Oregon and Washington trees 10 feet in diameter are not common.

Record Height for Pine Drops

The Lost Arrow Trail, just below the tennis court, is generally characterized by the presence of a great number of Pine Drops. During their 1941 season they were unusually abundant in their distribution and the average heights have seemed excessive. The largest plant that I examined measured 51¼ inches. To my knowledge this is a new record in height for the Pine Drops in Yosemite National Park.

SOME BOOKS ON TREES

By Harry C. Parker, Junior Park Naturalist

These publications will prove of value in preparing yourself for special attention to the trees of Yosemite National Park whenever you visit this area. This is merely a list of selected references; your librarian may be able to put other valuable books on the subject into your hands.

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YOSEMITE IN THE SPRING

Tranquil,—Master of all surrounding space,
Yosemite with its granite crags
Making a haven for soft white clouds.

Its Valley lush with green meadows
Guarded by tall fir trees,
Whistling in the wind.

Valley oak and starry-eyed dogwood
Mingle intimately
With wild azalea, fragrantly delicate,
Against such glorious ruggedness.

From snow capped mountains
Falls of white magic laughingly
Take sunbeams on a merry trek
To the river far below.

Man, as he views this wonder valley
Of tall crags and whispering timber,
Knows the hush of beauty.

Its stillness touches deep within him
A pulse that sends a vibrant note
Of thanksgiving to a Master Creator.

—Grace Hunnewell.

(This poem is a reprint from the July 9, 1940, publication, **The Wheel**, issued by the Rotary Club of Goleta, California.)