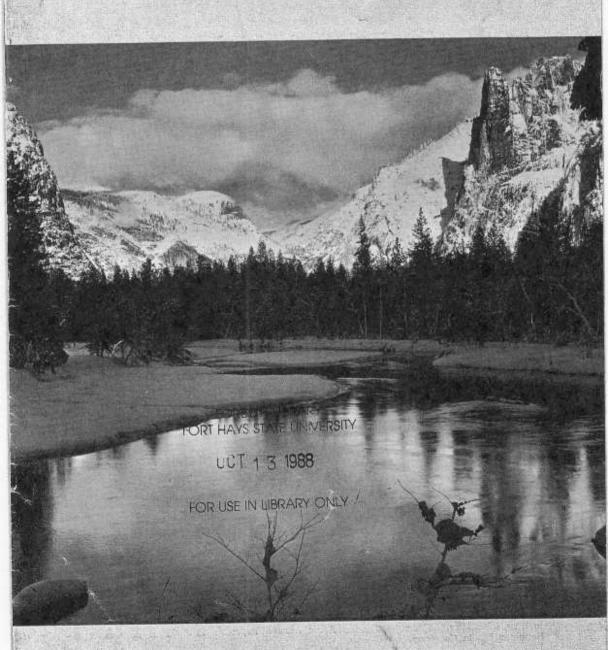
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osemite Nature Notes



HOW LOVELY IN SNOW By Elizabeth Godfrey Baker

The meadows are weird, as a frost-bitten beard And the branches of oaks are as bold pen strokes. The leaves on the ground make mysterious sound. As they're lifted and rushed in a sudden chilled gust. There's a feeling of tension and keen apprehension As the blue-fronted jay mocks the overcast gray. At last snow is falling in flakes most enthralling, To smother the earth with a heavy, white birth. The fawn and the doe walk through the first snow; Enchanted they seem, as though in a dream! The bear in his hold will sleep through the cold; The squirrels helter-skelter will find a snug shelter. But where is a cover for the fawn and its mother? See, they bed now, 'neath the cedar's low bough. The devilish howl of the coyote on prowl, Will come with the dawn and frighten the fawn. The morning is bright, a fairyland sight. How lovely in snow, are the fawn and the doe!

Yosemite Nature Notes

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C. P. Russell, Superintendent H. C. Parker, Assoc. Park Naturalist D. E. McHenry, Park Naturalist R. N. McIntyre, Asst. Park Naturalist

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THE SIERRA NEVADA BIGHORN IN YOSEMITE

By Fred L. Jones 1

It is known that the Sierra Nevada bighorn once occurred in numbers in what is now Yosemite National Park. According to accounts of early mountaineers hunting and disease were the chief factors that caused the population steadily to decline until the animals finally disappeared from the region. It has generally been believed that the last of the sheep were gone from Yosemite before 1900. In Animal Life in the Yosemite Grinnel gives the 1870's or 1880's as the latest years of occurrence, with the possible exception of wandering individuals. In 1898 in an article in the Atlantic Monthly entitled "Among the Animals of the Yosemite" John Muir stated that there were still a few bighorn present in Yosemite. This is the latest mention of live mountain sheep occurring in the park that can be found in natural history literature.

In August of 1949 while gathering information about the history of the bighorn that had occurred north of the park, I made the acquaintance of Mr. Bill Guinn, retired packer and cattleman, of Sonora. Mr. Guinn has had wide experience in the Sierra Nevada and recalls accurately conditions that prevailed in the early 1900's. He stated that in 1914 he and

Mr. Guy Scott, for many years State Game Watden at Soulsbyville, Tuolumne Co., packed into Yosemite to plant trout in some of the lakes. On this trip they heard of bighorn having been seen in the northern part of the park somewhere between the Matterhorns and Tuolumne Meadows in that year. Mr. Scott told Guinn that he had heard other reports from prior years of bighorn having been seen in the back country of his district. In a report on mountain sheep submitted to the Division of Fish and Game in 1912 (now on file at the Museum of Vertebrate Zoology, University of California) Warden Scott states that the last sheep he had heard of were seen about eight years prior (circa 1904) near the summit of the Sierra Nevada in his district. This, of course, was before he heard of the account related above.

Since none of these observations are first hand from Mr. Scott or Mr. Guinn and were unconfirmed by them they do not carry the full weight of certainty. However, the reports were received in good faith by reputable men and can so be added to the meager knowledge of the last years of the Sierra Nevada bighorn in Yosemite National Park.

^{1.} Mr. Jones is Junior Game Biologist with the California Division of Fish and Game.

THE FRIENDLESS HUNTER By John F. Nolan, Ranger Naturalist

"Say, Ranger, what are those things on your hat?"

"Porcupine quills, sir. We have quite a few porcupines around the vicinity of Glacier Point."

"Well, maybe you can tell me what I saw among the rocks as I drove up to Sentinel Dome. It was a long, very slender animal with a brown back and a creamy, suede like surface below. Its fur was very smooth and his legs short. His head was quite small and pointed at the nose, with large round ears."

"Mister, you saw a mountain weasel. Every once in a while we see one around Glacier Point. Their head and body average eight to eleven inches in length, with a slender tail that averages a little over half the length of both. He sees with beady looking eyes, and weighs from seven to twelve ounces. His coloration changes from brown during the summer season to white during the winter," except for the tip of his tail which always remains black. These changes allow him to forage the year round.

"Glacier Point isn't the only place in the park where this very vicious little animal is found. Probably the easiest place to see a weasel is on the floor of Yosemite Valley, where they are moderately common. Occasionally they are seen between Chinquapin and Glacier Point, or around Crane Flat, Ten Lake Basin and Tuolumne Meadows to Mono Lake on the east side of the high Sierras."

The weasel is a very bloodthirsty little animal that will apparently kill for the sheer joy of killing long after he has satisfied the demands of his appetite. I remember standing on the porch of the ranger naturalist cabin at Glacier Point one quiet July morning, when suddenly there was a terrific commotion among the many little chipmunks and goldenmantled ground squirrels that were always scampering about. The front yard was full of these little rodents darting this way and that way, as though it were the difference beween life and death. Many were going into their burrows, while others were seeking out a perch on top of several large stumps not too far away.

From this vantage point each began a loud and continuous chatter that could be heard at the far end of the Glacier Point Campgrounds, and lasting for approximately twenty minutes. Suddenly, I got the answer to the cause of this bedlam—a weasel darted out from under the cabin. First he would dash to the left where several rodents were making a terrific amount of noise, then to the right, where there were a few more doing the same thing, when his attention apparently was caught by three holes at the base of an old stump about fifty feet above the cabin.

After smelling the entrance to these holes he suddenly disappeared into one and was gone for just a few seconds when he reappeared with a young golden-mantle in his mouth. After looking around for a second, he dashed across the open area to go under the cabin with his kill. It was about this time I decided that in their effort to warn each other of the impending danger they only assisted the weasel in letting him know their whereabouts, otherwise he might have left because of poor hunting. In a span of twenty minutes this weasel had killed four golden-mantles.

Apparently there are times when the size of the weasel's opponent does not mean much to him. In this situation I want to cite the case of Assistan Park Naturalist Robert Mc-Intyre who, while walking to work by way of the meadow between his residence and the Yosemite Museum, was suddenly attacked by a weasel that evidently had its lair near by and was attempting to drive McIntyre away. Time and time again this little animal returned to the attack, nipping and tugging at the man's trouser cuffs. Possibly her lair had some young in it and she was trying to protect them.

Weasels have from four to six young in a litter and from two to three litters per year. Their nests are usually constructed of grasses and dried leaves and are found in holes, under woodpiles, in the burrow of a ground squirrel, among the talus slopes or even in a hollow high up in a tree.

Because of his physical structure, the weasel is able to invade the burrow of a rodent, or pursue his victim through a dense thicket with great speed and agility, and even ascend the trunks of smaller trees. This factor, added to his lust to kill, makes him an enemy to bird life as well as to rodents. He will eat dead flesh as well as that which he has just killed.

GIBBS GLACIER¹

By Harry C. James

Another glacier has been rediscovered and added to the list of those already known in the Sierra Nevada. Although only a remnant of its once proud self, and in the last stages of senility, unless weather conditions change during the next few years, it is, nevertheless, a real glacier with definite signs of life in its old ice-beds.

In 1945 a party of boys from The Trailfinders School was on a camping trip in the Tuolumne Meadows region of Yosemite National Park. In exploring around the wild country located between Mts. Dana and Gibbs, they noted a large snowbank sloping down to a series of moraines in the lower part of a glacial cirque. On careful examination by binoculars the boys felt sure that they had happened on a small glacier. However, it was too late to attempt to descend the broken cliffs of the cirque for confirmation.

This past summer they planned to make a real study of the region and, equipped with proper ropes and other mountaineering equipment and accompanied by Park Service Naturalist Dr. Carl Sharsmith, they left early in the morning of July 21 for that purpose.

The route of the party led up the wide pass between Mt. Dana and Mt. Gibbs. In a short time they had reached the spring which is the source of one of the main tributary streams of the Dana Fork of the Tuolumne River, and then the summit of the pass was reached and the search began for a route either down the cliffs or over the main snow field. The snow field was too dangerous to consider but a relatively safe route was found where the snow field ran into the rocks. The sun had melted away the snow here and we found a narrow,' winding cleft between the snow and the cliff. In

Discovered and recorded by I. C. Russell on his map, "Existing Gladers of the Slerra Nevada," opposite page 310, Fiftieth Annual Report, United States Geological Survey 1883-1884—Editor.



Mt. Gibbs Glacier, showing shade ice overlain by moraine. Arrow points to a person.

places where the boys had to step out on the snow, rope belays were quickly fashioned by George Bloom and Dr. Sharsmith.

By noon the entire party of 29 boys and four leaders had reached the bottom of the snow field and were indeed ready for lunch.

On the way down it was noticed that two great holes had melted out in the ice underlying one of the moraines. In the bottom of each of these holes were small, deep ponds of water colored by glacial mud. The upper pond was the color of greenpea soup and the lower one had begun to take on a slightly bluish tinge.

As soon as lunch was over we started over the lower edge of the snow field where the snow was just beginning to melt and expose the underlying ice. Here innumerable small streams of icy water were cascading down, some of them heavy with mud from recent small avalanches.

The moraine material was very

unstable and the utmost caution had to be exercised when the party stepped off the snow and ice and made its way toward the two great pits in the ice.

At these pits Dr. Sharsmith made some sketches of the exposed banks of ice and several photographs were made by different members of the party. The ice-axes were used to hack out great chunks of ice for closer examination. The samples of ice taken proved to be rather curious as the ice was peppered with small bubbles.

After a careful survey of the pits the party started the descent of the moraine. These proved to be of much greater extent than our view from above had led us to expect. Moraine material from the south side of the cirque was of grey granite, while that from the north and west was of red and vari-colored metamorphic rock. Below the largest moraine was a splendid lake, its waters a vivid blue from fine glacial mud still in suspension. Below

the lake the moraine material was more compact and the party made better time in its long hike down to Leevining Creek.

A week later Mr. Emmons Sebenius, one of our Trailfinder leaders, spotted another section of the glacier high up the south side of the cirque above the lake. This section had a long, narrow bergschrund which was easily seen from a ridge above Leevining Creek, about four miles above Leevining.

Mr. and Mrs. Charles Wilts spotted this same section a few days later from a ridge below the summit of Mt. Dana.

THE MARTEN IN THE WOODPILE By Dorothy R. Mayer

Every morning after a fresh snowfall at Glacier Point we were in the habit of going out to examine the telltale tracks in the snow of the night prowlers. There was usually a network of trails left by the skunks, the pack rats, mice, a Douglas squirrel and very often a coyote would encircle the house, look in at the windows and doors, then trace a zigzag course to every rock or tree where a squirrel might be hidden, covering the whole mountain top in his peripatetic search for food.

Then one morning, late in February, new tracks joined the collection on the porch. These were unfamiliar to us and we could not determine what they were. We traced them to the woodpile where they disappeared between the logs. Later in the day, while setting a tray of crumbs nearby for the ever demanding jays, we heard a low growl emerging from the dark recesses of the wodpile. We retired to the house to see what would happen, watching through the door.

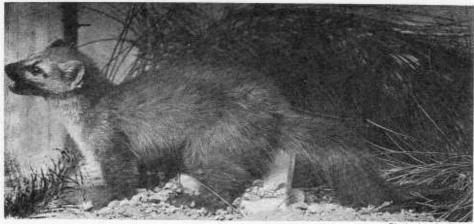
Suddenly the jays, who were busily wrangling over the food, flew off hastily and we saw a sharp little nose appear between the logs. Gradually a marten emerged from an incredibly narrow crevice eyeing the doors suspiciously, his rich brown fur and busy tail silhouetted against the white snow. At first he

was very nervous and slithered back into his dark hole with a very quickly snatched mouthful, but he soon became more confident and stayed long enough for me to sketch and photograph him.

We tried feeding him on the porch where we could observe him from indoors, but the jays, ever alert for a snack, would clean the plate pefore he could get to it. Then we tried holding the food until he put in an appearance. But he seldom reappeared after a disappointed look around, retiring to his quarters in disaust.

We discovered our friend had been living all winter under the steps at the north end of the house, his entrance well guarded by the woodpile, apparently sleeping contentedly until disturbed by the disappearing wall of logs. He, however, soon discovered the warm, comfortable hideout of the skunks in the cupboard of the hot water heater and thereafter took his meals in there with the skunks.

Our marten never became friendly and confiding like the other inhabitants of the mountain house, though he was always near by. We could hear his various activities under the floor at his end of the house and at night we could distinguish his footsteps overhead on his way to the water tank.



A Glacier Point Pine Marten.

Photo by Anderson

Later in March (1949) his first keen appetite being partially assuaged with anything he could get, his footprints were discovered in the snow farther afield where he had been roaming in search of a more natural diet of fresh meat, his predatory instincts once more asserting themselves. The squirrel holes under the rocks and trees have a new tracery

of footprints added to those of the coyote around their doorsteps, and we are not altogether certain that we still have two pack rats. There is an unusual silence under the counter and only one appears to be living there now. Perhaps they have gone the way of all flesh when a marten is around.

NEW LOCALITY FOR MT. LYELL SALAMANDER By Charles G. Danforth, Ranger Naturalist

On July 8, 1949, the writer had occasion to hike to the Firefall Ledge some 900 feet below Overhanging Rock at Glacier Point. The reason for this trip was to obtain, if possible, some of the glowworms (Microphotus angustus) which had been seen clinging to the vertical side of the Firefall Cliff on Sunday, July 3; when one had been collected.

Apparently there was too long an interval between the initial observation and the follow-up, and no glow-worms were seen. In the course of the search—which took place shortly after 5 p.m.—a small snow-seep or spring was located at the junction of the cliff face and the sloping ledge. The exact source could not be seen, as it dripped from a point

slightly back of my range of vision and some twenty feet above me.

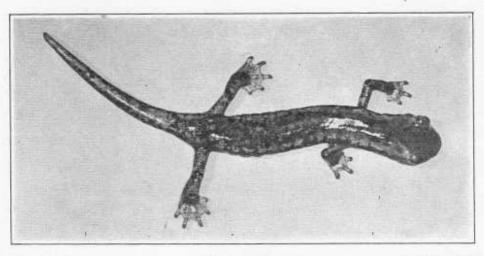
In observing the flora along the tiny course of the stream, it occurred to me to check the possibility of amphibian life as well. Under the first rock overturned were found 3 small salamanders which appeared to be similar to the Mt. Lyell salamanders previously seen by me (1936) on the top of Half Dome. After I made sure that there was a small colony present, five of them were collected, placed in alcohol and ultimately reached the desk of Associate Park Naturalist Parker where the identification was confirmed.

Since this is a new locale, a description of the area involved is important. As previously mentioned,

the general region was bare rock, the south portion rising vertically to Glacier Point, and the north portion sloping gently towards the valley floor as a wide ledge. The ledge itself has a steep eastward slope as well. At the point where the water poze contacted and followed the ledge-cliff contact, tiny puddles (8 to 10 inches across) were present and granite gravel had accumulated to a depth of one to two inches. Taking advantage of this "soil" were lush moss banks of perhaps a sauare foot area and several penstemons. The salamanders were in this moist, but not wet, granite earth, underneath small, flatter rocks. In the several areas investigated, the conditions were the same, with each rock having two or three Mt. Lyell salamanders (Hydromantes platycephalus) under it. There were also present many black beetles, the identity of which was not ascertained.

The whole ledge is in direct sunlight for only three hours or so a day, and the temperature of the water keeps the micro-area quite cool. Aside from the small volume of seep water, the region is quite arid, and is only some twenty yards up the ledge from the ash and burnt bark resulting from the fire-fall. The tiny pools are a yard or so separated from their neighbors, and the salamanders must come into the open if they are moving about between the dirt accumulations by the pools. Since no salamanders were seen in the open, and because they made violent escape motions when exposed, it may be assumed that they are static, or migrate, if at all, at night.

(Editor's Note: This new find adds to our list of Mt. Lyell salamander habitat areas and conforms very closely to the general micro-description of locales previously described from the park, These are: Half Dome, 8850 feet; Ledge Trail, 6700 and 6900 feet; Mt. Lyell (near), 10,800 feet: Tenava Canyon, 5800 feet: Triple Divide Peak (near) 10,700 feet and Upper Yosemite Fall, 4995 feet. This form has been collected also at Peeler Lake, just outside the northeast boundary. It is one of the rarest of animals, being known only from about a score of localities, extending from Sonora Pass south to Silliman Gap in Seguoia National Park.-H.C.P.)



Mt. Lyell Salamander

HOT HONEY

By Duane D. Jacobs, Assistant Chief Ranger

On November 28, 1948, Marshall B. "Buck" Evans (District Ranger, Chinquapin) and the writer went to Gin Flat to replace the reconditioned snow surveying instruments in the storage locker there. After doing this and a few other last minute chores preparatory to the winter season, we decided to drive down the Old Big Oak Flat Road to the old control station at what was formerly Gentry Ranger Station.

About a mile south of Gin Flat while rounding a curve we came upon a small brown bear weighing about 150 pounds who was standing in the road bed with his muzzle buried in the cut bark and a swarm of vellow jackets buzzing around him. Hastily rolling up the windows on our pickup we coasted past him. then stopped about 150 feet away. As we passed bruin he finally became aware of the car and tore up needles and dirt in his scramble up the bank. He, too, stopped about a hundred feet away looking first at us and back to the yellow jacket nest. A large number of the yellow jackets had followed him and we could see his loose hide twitched and jerked frequently as a jacket penetrated his fur coat and buried a hot stinger in the flesh. He also took frequent swipes with his paws across his face and eyes to brush the insects off.

Finally, deciding that we were not interested in his vellow jacket nest and evidently were harmless, he ambled quickly back to the nest to finish his feast of yellow jacket larvae and pupae plus the food stored for them to live on. As he resumed lunch, the yellow jackets attacked with renewed tury, but bruin only twitched and wiped them off his face without missing a bite. Then, with a final look around to see if he had missed anything, he galloped away, indicating that as long as there was food to be had he could take it but there wasn't any sense in being stung for nothing.

In discussing this interesting scene afterwards, Buck and I definitely agreed that here was a bear who had absorbed enough "heat" from the stingers of those yellow jackets to last him through many an approaching cold winter night.





Yosemite Chapel in Old Village.

Photo by Ansel Adams

