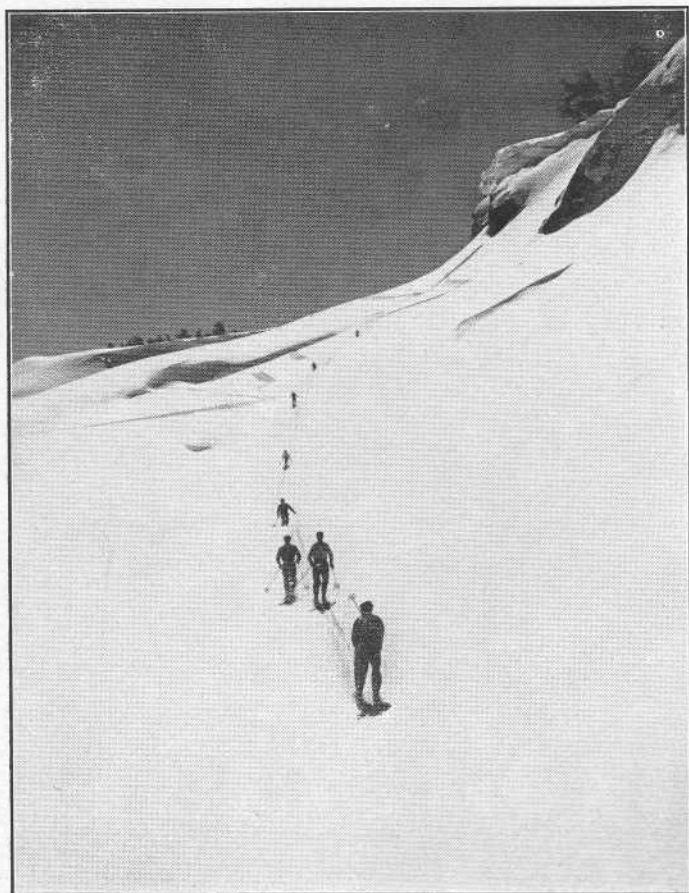


YOSEMITE NATURE NOTES

Vol. XXIV

April, 1945

No. 4



Yosemite Nature Notes

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

F. A. Kittredge, Superintendent

C. F. Brockman, Park Naturalist

M. V. Walker, Associate Park Naturalist

VOL. XXIV

APRIL, 1945

NO. 4

AN ASCENT OF MOUNT HOFFMANN

By Helen K. Sharsmith

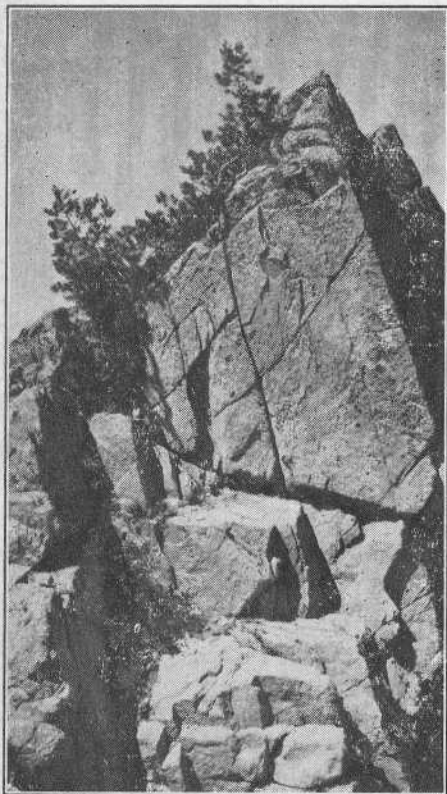
We were five in our base camp on May Lake. We had left our car on the Tioga Road at the entrance to the trail, and had carried in on pack boards the equipment and food we would need for a two weeks' stay. With the May Lake High Sierra camp abandoned for the present, we had a solitary camp among the great hemlocks at the upper end of the lake, where the tiny stream which trickles down from the higher reaches of Mount Hoffmann flows into the lake. It was a beautiful and peaceful camp, in many ways a luxurious one. For the benefit of our

youngest member, Linnea, 1½ years old, we had brought a tent. John, the 4½ year old, was snug and happy with a tarp and sleeping bag. Mr. Carter, 75 years old, the senior member of our group, slept beside the grub to shoo away the bears.

We took many excursions from our camp. On these trips Linnea rode contentedly in the "hickey," the Piute word for cradle board or papoose carrier, on her mother's back. The hickey had been built for John and had carried him on many mountain trips, but now John trotted along on his own sturdy legs.



May Lake lies poised, saucer-like, on the slopes of Mount Hoffmann. Directly behind our camp rose the



Whitebark pine

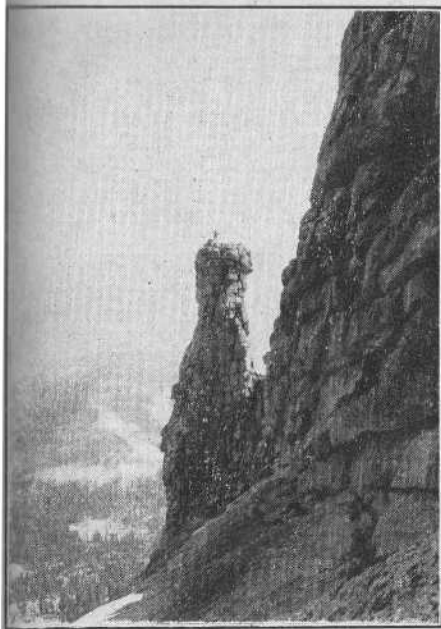
sloping granite wall of the mountain. On the morning of August 15, 1944, the five of us started out for the summit of Mount Hoffmann, following upward the "hide and seek" stream that spilled into the lake through the middle of our camp. We followed its every twist and fanciful eccentricity up the steep granite wall. Far up the glacier-smoothed slopes we trudged,

while the lake grew small below us and the trees, as we approached timberline, grew small around us. The stream, too, grew smaller, until under the northeast ridge which leads to the summit plateau of Mount Hoffmann we came to snow banks from which the first drops of our stream trickled.

Then our route took us up a long ridge to the plateau that lies beneath the summit. Just under the rim of the plateau the boulders were enormous and small John found the climbing hard, but Linnea only smiled at the jouncing she was getting in her "hickey." On the plateau we found ourselves already filled with the exhilaration of accomplishment, so we celebrated by eating lunch behind a protecting outcrop of rock, for the wind was strong. Here the only trees were whitebark pines, bent in supplication to the wind, and all the other vegetation hugged the ground in lowly form, thus escaping the wind's greatest fury. From our lunch site it was a long, gentle walk over the loose granitic sand of the plateau toward the summit rocks. Small alpine locoweeds were blooming in profusion in the disintegrated granite, but the grasshoppers were in even greater profusion. They had stripped many of the locoweeds and were wasting no time on the rest.

We were close to the sheer north face of the mountain now, and snow was still thick in two of its perpendicular chutes. Then we made the last

sharp ascent to the summit.
From the hemlock-fringed shores of



Mt. Hoffmann thumb

May Lake to the very tip of the mountain we had had full measure of those satisfactions for which the mountain climber labors. But there is something unique in this climb to Hoffmann's summit, for Mount Hoffmann lies almost in the center of Yosemite National Park, and from its nearly 11,000 foot summit, Yosemite scenery radiates in every direction to give about the most comprehensive view of the Park that can be obtained. With the aid of a topographic map it is simple to identify most of the major peaks in the Park, and to orient oneself to the Park topography as a whole. So we were glad we had climbed Mount Hoffmann, and proud as we wrote our names in the register, for we think our group had the distinction of including both the youngest and the oldest ever to climb this lovely mountain.

This Month's Cover Illustration

calls attention to the snow survey trip made March 28-April 2 to the Tuolumne Meadows region. This is the most extensive of several similar surveys made each winter at various points in the park. Snow depth and water content is determined on five courses. Results this year indicated a heavier than average snow pack.

	Past Average (inches)		1945 results (inches)	
	Snow depth	Water content	Snow depth	Water content
Snow Flat (8700')	104.0	42.4	146.2	51.2
Tenaya Lake (8157')	77.0	35.2	112.8	37.2
Tuolumne Meadows (8600')	56.1	23.3	84.0	28.2
Dana Meadows (9700')	87.0	33.5	103.0	38.9
Fletcher Lake (10,300')	81.5	33.1	103.8	44.2





YOSEMITE—TYPE LOCALITY FOR RECENT MAMMALS

By Myrl V. Walker, Associate Park Naturalist

An earlier article in Nature Notes (December, 1944) listed the various species of amphibians and reptiles which had been "discovered" in Yosemite National Park. It also seems appropriate to call attention to the various species of mammals with Yosemite as their type locality.

Although most of the mammalian types discovered here are of the smaller forms, there is one that belongs to the middle-sized division of the carnivore group—the Sierra pine marten (*Martes caurina sierra* Grinnell and Storer). The type specimen was taken in Lyell Canyon. The type specimen of the Yosemite cony (*Ochotona schisticeps muiri* Grinnell and Storer), was taken in the vicinity of Ten Lakes. The cony belongs to the "rabbit" family. It is the smallest member of the family present in this area, being much smaller than the ordinary cottontail rabbit.

The Yosemite mole (*Scapanus latimanus sericatus* Jackson), and the Yosemite shrew (*Sorex montereyen-*

sis mariposae Grinnell), were both taken in Yosemite Valley, while the Lyell shrew (*Sorex lyelli* Merriam), a very interesting form, was taken near Mt. Lyell on the crest of the Sierra.

Two other small forms that were taken in Yosemite Valley are the Yosemite meadow mouse (*Microtus montanus yosemite* Grinnell), and the Yosemite pocket gopher (*Thomomys alpinus awahnee* Merriam). The two type specimens taken in the Tuolumne Meadows are the Sierra cantankerous meadow mouse (*Microtus mordax sierrae* R. Kellog), and the Sierra Nevada lemming mouse (*Phenacomys intermedius celsus* A. B. Howell).

It is interesting to observe from the above listing of type forms that of the total number of nine types from the park four came from Yosemite Valley, two from Tuolumne Meadows, two from near Mt. Lyell, and one from the Ten Lakes area.

NEW ACQUAINTANCE

By Grace V. Sharritt

"Painted Robins" they are sometimes called, in spite of an imposing Latin title, (*Ixoreus naevius*). But their more correct common name is Varied Thrush, for their feathers are varied indeed; from a gorgeous colored neckpiece to a smart black band across the breast.

Numbers of these interesting birds came down from the north last autumn to winter in Yosemite Valley and lent exciting bits of interest to bird walks on wintry days. It takes a gray day, dripping with fog and rain, to make you most readily aware of the Varied Thrush for such is the kind of weather they prefer. Like my first experience

The skies were leaden but the air was sharp with pine fragrance as I walked briskly from the Ranger Club toward Yosemite Lodge. The Stellar Jays winging above and just in front of me seemed to deepen the shadows of the November afternoon, when suddenly a streak of tawny sunshine flitted from the path into the thick, green boughs of a cedar.

What were these birds? I did not know.

Now, as everyone knows, a strange bird is a personal challenge to any ornithologist. But when the bird is found by one traveling in new zones and territories, the adventure assumes Robinson Crusoe dimensions.

It was in some such mood that I stalked my birds. They looked like robins, yet they weren't robins. "Fancy robins" I called them. The backs of the birds had the same brownish coloring. They scratched among the dead leaves on the ground like robins and thrushes and towhees. But these birds excited my imagination with brilliant orange throat patches and the same vivid feathers above the eyes. There was color on the wings when the birds flew—but how much or exactly where, I could not determine. For like a delightful dream that escapes conclusion upon awakening, just so did my dream birds escape identification.

The birds eluded me all the way back to the Museum. I rushed upstairs to the library and poured my findings into the amused ears of naturalists Brockman and Walker. When I had finished with my effervescences they spoke as one voice of authority, "You saw the Varied Thrush."

The news affected me like all sudden acquaintances with new birds do people who are interested in nature and the outdoors, for all my life I had wanted to see this beautiful thrush pictured in western bird books. It took Yosemite to produce the feathers-in-the-flesh to a neophyte from east of the Mississippi.

FOOD HABITS OF YOSEMITE MAMMALS AS INDICATED BY THEIR TEETH

By Lt. (jg) Richard G. Miller

PART III

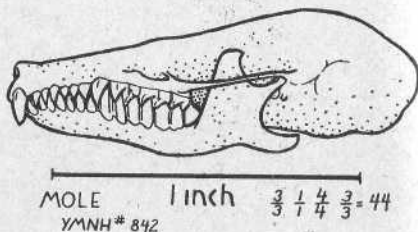
Moles and Shrews (Insectivora)

Moles are common in Yosemite, but are very seldom seen. They spend a lifetime underground and rarely come to the surface, even at night. They feed on grubs, worms, and other insect food which may be found in the soil, seeking this nourishment by tunneling just beneath the surface, and finding their prey among the roots of plants. The little trails of arched sod that are seen in the meadows and upon the forest floor of Yosemite are made by the upheaval of the soil as the mole pushes its way along. These ridges readily belie the path of the burrows. By scooping into the loosened earth with your hand a neat round tunnel several inches in diameter will be exposed. It isn't likely that you would see the mole, however, even if you waited for him, for he would avoid coming into the lighted part of the tunnel.

Practically no vegetation is consumed by moles. Plant damage along mole workings is attributed to insects (on which the mole feeds) or is caused by mice which find that fresh mole workings open up new sources of food.

The teeth of moles are specialized for cutting through the outside skeleton of insects. The first upper in-

cisors are broad blades which are useful in clearing the underground passageways of roots as well as for cutting up food. The other incisors, canines and premolars are sharp grasping meat-teeth. The upper molars in the back of the mouth are set just outboard of the lower molars, and these opposing teeth perform as shears.



The head is long, pointed, and slender and seems designed for the main purpose of housing this over-size and formidable set of teeth with modification of eye and ear to the status of rather unimportant organs. The whole body is built for a life of burrowing, being modeled as an "entering wedge."

Although the mole is small, soft, and tender in appearance it is without a rugged and hardy creature. It has powerful shoulders and neck muscles. Its jaws are strong. It feeds in a savage and voracious manner, and it is said it eats its own weight

in insects daily. At night it may forage on the surface and is sometimes preyed upon by owls and other nocturnal predators.



Moles related to those in Yosemite are of widespread distribution in North America. They belong with the shrews in the order Insectivora. Shrews found in Yosemite resemble the moles in having a long mobile snout, small or hidden eyes and ears, elongated head, and a voracious appetite for insects. Their teeth, though fewer in number than those of a mole, are even more highly specialized for an insectivorous diet. Shrews possess an almost insatiable appetite and a rapid rate of digestion, and seem to need food at rather short intervals. They have to consume several times their own

weight in insects or other animal food daily in order to sustain their tiny bodies. The common shrew ventures forth from its tunnel under and among the forest litter in search of anything it can devour. The water shrew goes into the small streams to secure water insects as a large part of its food.

Moles and shrews are active throughout the summer and winter and are an important source of food for the foxes, weasels, coyotes and owls of Yosemite.

Bats (Chiroptera)

In all Yosemite bats the teeth are specialized for catching insects. The canine, or "corner" teeth, are exceedingly large for so small an animal, those of the upper jaw being



quite tusk-like, and ideal for grasping. The molars and premolars, on the sides of the mouth, are offset because the upper jaw is wider than the lower and work like two pairs of jagged meat cutting scissors. Bats catch food on the wing. Swift and maneuverable, these little flying mammals wing through the dusk and the dark devouring the many kinds of insects encountered in the

air.

Because both are insect-eaters, the bat's teeth have some resemblance to those of a mole, although there is little similarity between the light body of the bat and the sturdy wedge-shaped build of the mole. The arms of the former are long and slender with finger bones greatly elongated. These fingers are the "umbrella ribs" over which the skin membrane stretches to form the flying surfaces. The bat's nose is short and rather dog-like, but with large nostrils. The eyes may be seen through the fur and the ears are large and upright. It has been discovered that these forward-directed ears are attuned to catch the reverberations of the bat's squeak echoing from branches, wires, and other obstacles in the line of flight. Thus warned of these obstacles, the bat may alter its course to avoid collision without ever seeing the obstructions. The ears are also of unquestionable importance in locating insects in flight.

Bats spend the daylight hours and much of the night at rest in dark and sheltered seclusion, foraging only during the evening hours and sometimes just before dawn. They come

forth at dusk when a certain degree of darkness has been reached, this varying among the different species. Insects are a rather concentrated form of food, and this may account for the bat's ability to acquire enough nourishment in an hour or so of feeding to last it through the night and day till feeding time the next evening. In late summer bats start getting fat, storing up enough energy to carry them through the lean insectless months of winter. Which species of bats hibernate, and which migrate to warmer climate is still the subject of study.

Bats are widespread in Yosemite, and though the records are few the animals appear to be present in considerable numbers. Eleven species of bats are recorded for Yosemite National Park, and are fundamentally similar in form.

All North American bats are insect-eaters, those which have teeth specialized for eating fruit, or blood, never occurring this far north.

In consuming large quantities of wood-boring beetles, moths and other flying pests which are destructive of forest trees, the bats are of unquestionable value in the Yosemite region.

Part IV—Even-toed Hoofed Mammals (*Artiodactyllo*), and Hares, Rabbits and Pikas (*Lagomorpha*), will appear in the next issue.





Digitized by
Yosemite Online Library

<http://www.yosemite.ca.us/library>

Dan Anderson