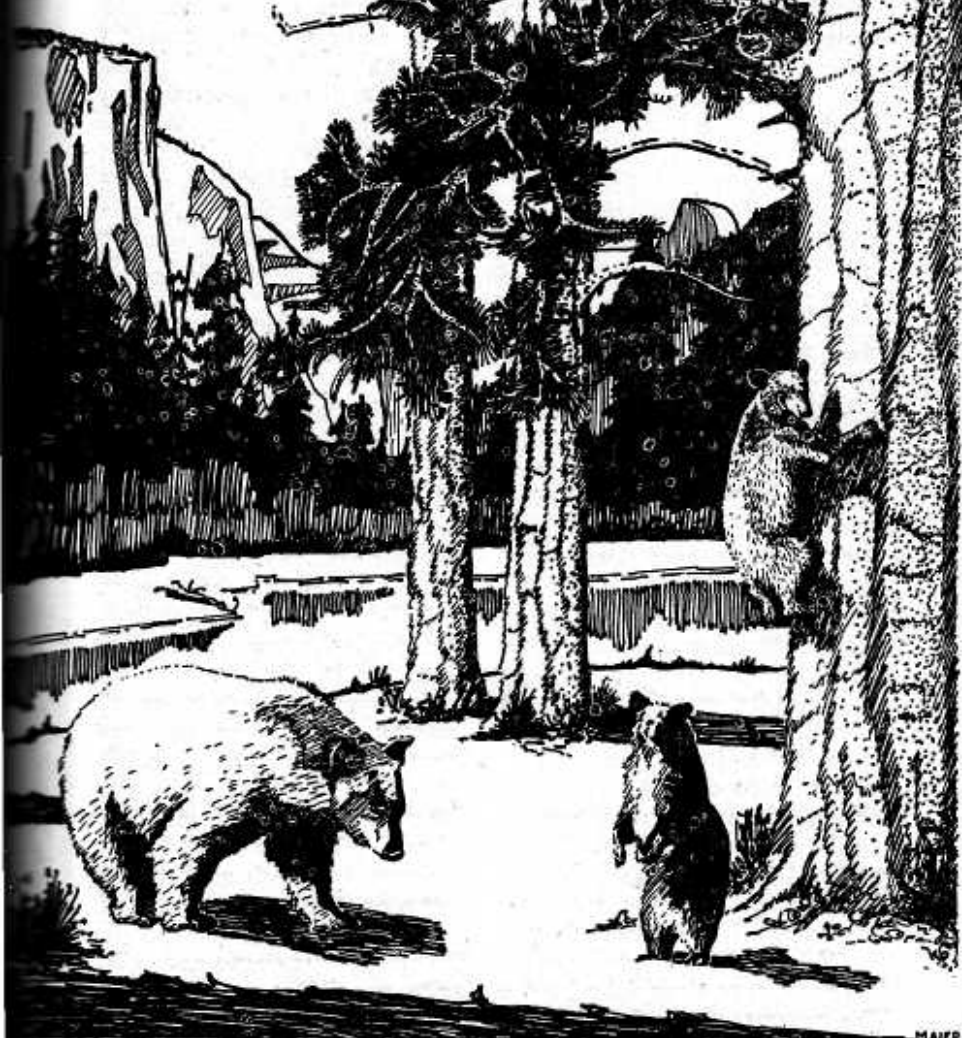


YOSEMITE NATURE NOTES



MAIER

Volume V September 30, 1926 Number 9

A WILD-LIFE CREED.

A conservationist's creed as to wild life administration is given by Dr. Joseph Grinnell, professor of zoology and director of the California Museum of Vertebrate Zoology at the University of California, in a recent issue of "Science." In brief, the creed follows:

1. I believe that the fullest use should be made of our country's wild life resources from the standpoint of human benefit—for beauty, education, scientific study, fur, etc. All these possible uses should be considered in the administration of wild life, not any of them exclusively of the others.

2. I believe that that portion of our wild animal life known as "game" belongs no more to the sportsman than to other classes of people who do not pursue it with shotgun and rifle. More and more the notebook, the field-glass and the camera are being employed in the pursuit of game as well as other animals.

3. I believe it is unwise to attempt the absolute extermination of any native vertebrate species whatsoever. At the same time it is perfectly proper to reduce or destroy any species in a given neighborhood where sound investigation shows it to be positively hurtful to the majority of interests.

4. I believe it is wrong to permit the general public to shoot crows or any other presumably injurious animals during the breeding season of our desirable species.

5. I believe in the collecting of specimens of birds and vertebrates generally for educational and scientific purposes. A bird killed, but preserved as a study-specimen, is of service far longer than the bird that is shot just for sport or for food.

6. I believe that it is wrong and even dangerous to introduce (that is, turn loose in the wild) alien species of either game or non-game birds and mammals. There is sound reason for believing that such introduction, if "successful," jeopardizes the continued existence of the native species in our fauna, with which competition is bound to occur.

7. I believe that the very best known way to "conserve" animal life, in the interests of sportsman, scientist and nature-lover alike, is to preserve conditions as nearly as possible favorable to our own native species. This can be done by the establishment and maintenance of numerous wild-life refuges.

8. In the interests of game and wild life conservation generally, I believe in the wisdom of doing away with grazing by domestic stock, more especially sheep, on the greater part of our national forest territory.

9. I believe that the administration of our game and wild life resources should be kept as far as possible out of politics. The resources in question should be handled as a national asset, administered with the advice of scientifically trained experts.



YOSEMITE NATURE NOTES

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HETCH HETCHY, THE TUOLUMNE'S YOSEMITE

By C. P. Russell

NEXT TO Yosemite Valley, Hetch Hetchy has been the most wonderful and most important feature of the great national park. John Muir called it the "Tuolumne Yosemite," for before the dam was built it was a counterpart of the Yosemite, not only in its crystal river and sublime rocks and waterfalls, but in the gardens, groves and meadows of its flowery park-like floor. The Hetch Hetchy floor (the present reservoir bottom) is about 3700 feet above the sea. Like the Yosemite Valley it was glacier carved and 20,000 years ago when the climate changed and the invading river of ice melted back, the Hetch Hetchy basin was occupied by a natural lake. The surface of this first lake stood at about the level of the present bottom of the man-made lake. Sands brought into the ancient lake Hetch Hetchy by the streams flowing from melting ice masses above filled it, and from a geologist's standpoint it was but a short time before the tarn disappeared and the gorge was floored with a flat expanse of sand. Plant life invaded the sandy flat and prior to the building of the dam a park-like condition existed here comparable to the present condition in Yosemite Valley. In fact, Hetch Hetchy and Yosemite have similar histories; both were first stream cut and both experienced ice invasion. About one-third of the present depth of both canyons is due to glacier carving.

The similarity between the Hetch Hetchy and the Yosemite cliffs has excited the wonder of every observer. Standing boldly out from the south wall is a strikingly picturesque rock called "Kolana." It is the outermost of a group 2300 feet high corresponding with the Cathedral rocks of Yosemite both in position and form. On the opposite side facing "Kolana" is a counterpart of El Capitan of Yosemite, which rises sheer and plain to a height of 1300 feet. The Yosemite Point and North Dome are also here represented with somewhat comparable

structures. At the head of Yosemite valley the great Half Dome rears its magnificent bulk and here the valley is bounded in the same way, though the head rock is far less wonderful and sublime in form.

Wapama Fall Carries More Water Than Yosemite

The great Hetch Hetchy fall "Wapama" is the counterpart of the Yosemite fall. It is 1700 feet in height and has a greater volume of water than has Yosemite. So wonderful a spectacle as Wapama might

well seem glory enough for one valley; but here again is typical Yosemite extravagance. Out in the open sunshine descending like thistledown from the massive brow of "Kolana," free in the air for a thousand feet, is Tueeulala—which has no Yosemite counterpart. Besides this pair of falls there was a broad, massive fall on the main river a short distance above the head of the valley. It was only about twenty feet high but its roar as it plunged into a surging pool might be heard a long way. In position it was to be compared to Vernal fall of Yosemite. It is now submerged far below the surface of the Hetch Hetchy reservoir.

The floor of the valley was about three and one-half miles long and from a fourth to one-half mile wide. The normal depth of the present reservoir is 220 feet and it extends seven and one-half miles back from the dam. Into it drains the water from 459 square miles of territory and 67,000,000,000 gallons may be impounded behind the dam.

Only in the spring is Hetch Hetchy reservoir filled to capacity. At other times the water is drained gradually to supply the users and consequently the shoreline constantly changes. A white belt above the waterline marks the maximum level of the lake.

The Battle for Hetch Hetchy

As one stands at the edge of this artificial lake there is a tendency, as Muir says, to lift the eyes to man-made dams and not to nature's monuments. Yosemite National Park was established to make this region free from attack by gain-seekers, but there is, and probably always will be, that universal battle between right and wrong. In 1903 the San Francisco Supervisors applied to the government for the use of Lake Eleanor and Hetch Hetchy as reservoirs, the water from which was to be used by the city of San Francisco. No little opposition met this bold attempt to raid a national park and for years the invasion was prevented. In 1908, however, Secretary of the In-

terior Garfield granted a permit legalizing the acquisition of storage reservoir sites on lands and waters of the Tuolumne river system within Yosemite National Park. With a change in administration in the Interior Department there came an order for San Francisco to show cause against the revocation of that portion of the Garfield permit relating to Hetch Hetchy valley. President Taft ordered an investigation by a board of United States army engineers, and because development of a water supply in other sources would have cost more than the Hetch Hetchy project this board recommended the use of Yosemite National Park. After a great deal of argument before Congress, the Hetch Hetchy grant was passed by both houses and signed by the President in 1913. By this act rights in 420,000 acres of the public domain were granted forever to the city of San Francisco.

The people of San Francisco had authorized the issuance of \$45,000,000 of bonds for the construction of the project, and actual work was commenced as soon as the congressional grant was obtained. In April, 1923, the Hetch Hetchy dam was completed after three and one-half years of work and an expenditure of \$7,460,000. The various phases of the entire development of dams, reservoirs, tunnels, power houses, siphons, bridges, railroads, etc., have entailed a total expenditure of \$43,550,000. One hundred and fifty-five miles of tunnels and pipe lines may some time conduct this Tuolumne water to San Francisco via Buck Meadows, Priests, Oakdale, Vernalis, Newark, Redwood City, and thence up the San Francisco peninsula.

Unquestionably modern engineers have accomplished a marvel in constructing this huge dam. Man's progress is here manifest in astounding form and the promise of a view of this great project will induce great numbers of men to journey to the site. John Muir was right. Man's eyes are lifted to man-made dams. The question now is asked—Do we have a place for power projects in our Yosemite or should this mutilated corner be excluded from the park?



RIPPLES OF THE RIFFLES

By R. D. Harwood

AMONG the water-smoothed rocks over which Tenaya Creek flowed in peaceful riffles on its way from Mirror Lake to the Merced river a gigantic boot-clad foot moved ruthlessly. Many peace-loving inhabitants of this little world were thus rudely brought from their homes. They felt the rapid rush of the stream in a most unfamiliar manner; there were no stable rocks for their distraught bodies to cling to. In the rapid current they were hurled on to their destiny, only instead of a gaping fish mouth they were almost immediately caught up by a fine net which stretched across their path. The great foot halted and the net with its load of small pebbles and disturbed insect beings was lifted from the water.

Now just a word as to why these interesting forms of life dwelt in such an unusual situation. To them, perhaps, there was nothing unusual about it for countless generations of ancestors had been living under similar conditions and had prepared them for just this sort of life. There was an abundance of good oxygen so necessary for their existence and the usually kindly stream brought them plenty of food in the form of bits of plant and animal material which were taken out by the various inhabitants in various ways. Then, as is always the way of the world, certain of these inhabitants preyed upon their smaller or less armed but more tootsome brothers. The rocks, stuck quite fast in the gravel of the stream bottom, protected them from their larger enemies, especially fish. So here among the rocks in this beautiful riffle there flowed on, like the water, the endless cycle of life.

The screen when lifted from the water disclosed a great diversity of life but they all had this in common—they were in various ways all adapted for this very rather highly specialized environment. Among the accumulated debris there leisurely crawled a Planaria. Being only a worm, he lacked much evidence of intellectuality but seemed to flow aimlessly on. He had his good points, though. He had his body of such form as to be readily adaptable, for by being soft and possessed of a set of muscles, however simple, he could worm his way almost anywhere. Then he was flat and stuck close to any object. His smooth and slimy surface made capture in a location so precarious rather difficult.

The Suspicious Looking Hellgrammite

Most conspicuous of all was a two and one-half-inch hellgrammite, a ferocious looking beast he was; quite enough to cause the aorta of a dainty may fly naiad to force its colorless blood more rapidly around the body cavity. His highly chitinized head was well provided with a pair of massive mandibles, denoting a carnivorous appetite of no meager proportions. The three

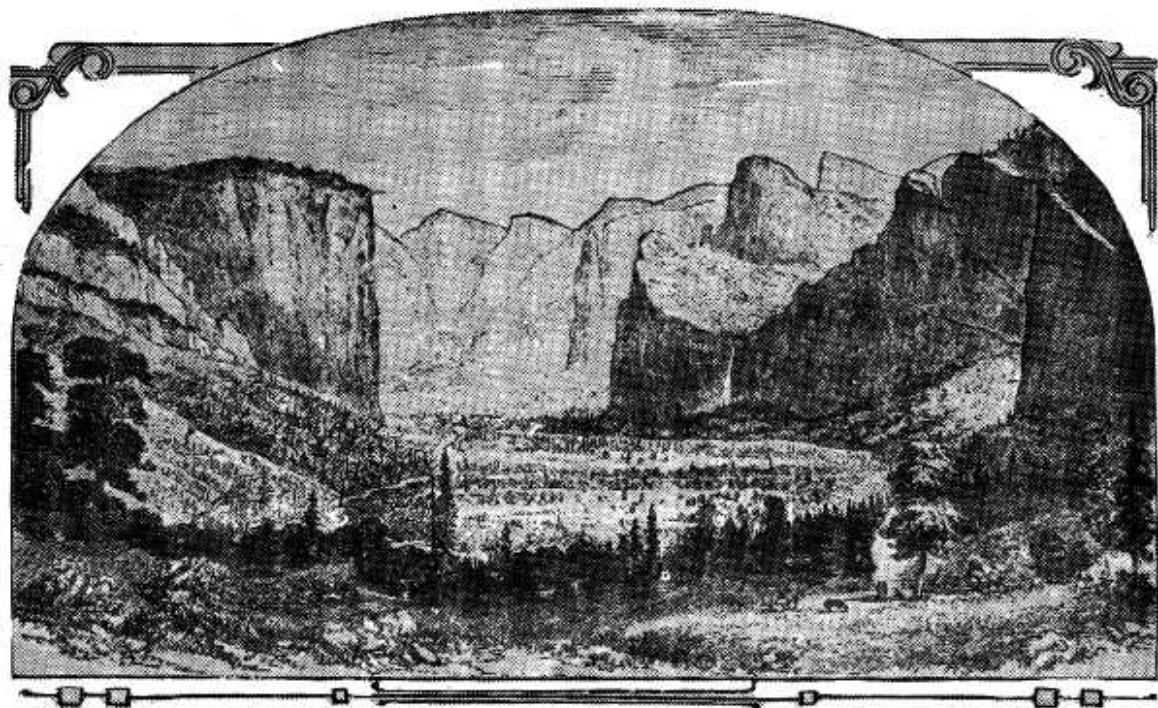
pairs of true legs and the seven pairs of leg-like lateral appendages gives to him a centipede-like appearance, quite unlike that of the large gauzy-winged insect he should become. For two years or more he has been feeding voraciously on those young insects so unfortunate as to be unprotected in his immediate neighborhood. Now he is almost ready to crawl out of the water and enter that pupal period of transformation in anticipation of the majestic adult *Chauliodes*.

The Larvae of the Caddis Fly

Green worm-like creatures crawled awkwardly along the screen. Others of similar appearance were quiescent in transparent capsules like glass encased mummies. These were the larvae and pupae of the caddis flies. The larvae are perhaps the most interesting of the stream dwellers. These little case builders were disturbed when the stones which constituted their foundation and their walls were torn loose. Fitting into little niches, perhaps between stones, perhaps underneath them or even on top of them, they build their beautiful little houses by tying together tiny pebbles. This feat of masonry is no mean accomplishment for some of the rocks are of greater weight than the caddis worms themselves. Cousins of these may build log houses from bits of wood and leaves or may make dainty shell-like houses or sand grains. But these are the net spinning caddis worms and they must build strong houses well anchored in the swift current of the stream. They may crawl forth from these cases in the quest for food or they may spin little fish nets in front of them. These nets are in the form of an irregular funnel with the lower end at the mouth of the case. Small food particles are thus caught and brought right to the waiting jaws of the larvae.

Aside from or in relation to their habits the larvae have interesting adaptations. At the caudal end of the body there are two hooks which serve as anchors to hold the possessor securely in its case. Then when he crawls about, these hooks give him a secure footing and he

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Etching made from first Yosemite Drawing

The Hutchings party halted at Inspiration Point in June, 1855, and Thomas Ayres, then and there made the first pictorial record of Yosemite's beauty. In 1859 Hutchings & Rosenfield published a lithograph from this first drawing. "Scenes of Wonder and Curiosity" was published by Hutchings in 1861 and in the book was reproduced the etching shown above, which was made from Ayres' drawing. The original pencil drawing, a copy of the 1859 lithograph, and books containing reproductions of the etching are now exhibited at the Yosemite museum.

HISTORIC DRAWINGS

By C. P. RUSSELL

Annually it is related in the press of the Nation that J. M. Hutchings, publisher of the California Magazine in San Francisco, came in 1855 to the unknown Yosemite valley with the avowed purpose of viewing for himself the "waterfall a thousand feet high," described very casually by Indian fighters, who discovered the valley in 1851. Sometimes these Yosemite publicity articles mention that one Thomas Ayres, artist, accompanied Hutchings, that sketches of the suspected wonders might be given to the growing race of Californians. The most ardent collectors of California today pride themselves upon the possession of rare lithographs and prints reproduced from certain ones of these drawings, but that Ayres' original work still exists has never been declared.

Seventy-one years after Hutchings' first tourist party gazed into Yosemite's beautiful gates Mrs. Ernest W. Bowditch of Milton Mass., visited the new Yosemite museum. With her came a remembrance of ancient Yosemite pencil drawings that for years had been cherished by her family. Conversation with the curator of the museum disclosed the fact that old pencil drawings of Yosemite valley might in all probability be the very drawings made by the first artist ever to enter the valley. Mrs. Bowditch became more interested than ever in her unique possessions, and on returning to her Massachusetts home removed each picture from its

frame and discovered the signature, "Thos. Ayres, Del. 1855."

In 1853, James Alden, Mrs. Bowditch's great uncle, came to California as a commander in the United States navy. He was appointed to the coast survey and naval records indicate that he served on the commission to settle the boundary between Mexico and California. Sometime after 1856 and before 1860 he visited Yosemite valley and the adjacent Big Trees. Probably on his return to San Francisco he fell upon Ayres' drawings as the highest class mementos of the wonderland he had seen and procured ten originals and one lithograph. Passing years witnessed the apportioning of the drawings among Admiral Alden's descendants, but their value was appreciated and not one picture suffered through the handing down.

Mrs. Bowditch appealed to her sister, Mrs. C. W. Hubbard, and her daughter, Mrs. A. H. Eustis, who also held an interest in the heirlooms, and the three ladies agreed that the new fireproof Yosemite museum was a fitting repository for the priceless relics. The drawings now occupy a place of prominence in the history room of the museum, and all lovers of Yosemite must acknowledge an indebtedness to the Massachusetts families of Alden and Bowditch, whose sense of values have preserved these treasures and made them available to Americans through the government's Yosemite museum.

Continued from page 67.

loops along rather after the manner of an awkward inch worm. Along the soft abdomen are found countless thread-like gills which facilitate a good exchange of gases as the oxygen-bearing water flows rapidly through the case and continuously bathes them. The only chitinized portion of the larva are those parts of the head and thorax which may project from the case.

Soon these delicately green larvae will close the entrances to their houses with silk, there encase themselves and take on the transitory characters of the pupae. Then when the moth-like adults are ready to emerge, will they crawl forth beneath the water and rapidly ascend to the surface or will the pupae cut through the silken door and make their way to the surface, there to release the mature caddis flies? That remains yet to be determined in this case.

At first unnoticed among the similarly colored rocks a crane fly larva lay. For minutes he lay still and then as though recovered from the shock of disturbances, he began to move. His mode of locomotion is most interesting. Devoid of true legs he moves by a series of worm-like expansions and contractions of the body, aided by fleshy tubercles, and is able to crawl along quite readily. As a further adaptation there is a so-called pushing ring which is located near the posterior end of the body. It is of skin and is expandible in a most balloon-like fashion. By means of this disc the larva is able to push himself along and by reason of his very soft body, is able to squeeze through narrow places. The quite harmless mosquito-like adults may be seen flying about lights at night.

The Stone Fly Naiads

Several species of stone fly Naiads may be seen crawling about. They are flattened and possessed of two caudal filaments. The three divisions of the thorax corresponding to the three pairs of legs are sharply separated and in some beautifully marked. They resemble some of the May flies that also may be seen crawling about on the under surface of the rocks. However, a careful examination will reveal their differences. If one looks at the under surface of the thorax of these stone flies he will see tufts of hair-like growth near the base of each leg. These are the respiratory organs, the gills. In May flies they are borne along

the first seven segments of the abdomen.

Myriads of tiny May flies crawl undecidedly about on the bits of rock. Requiring the rapidly flowing water with its fresh supply of oxygen they flutter their gills most painfully in still water. On the rapidly drying surface of these rocks the delicate gills soon become stuck to the little bodies and the ever perilous life is brought to an end. When in fresh water these gills may be seen, rhythmically fluttering.

To learn the life history of these insects is to marvel. For a year or more these Naiads live in the water frequently molting and thus growing finally they transform. This transformation is a wonderful thing, for literally millions of a given species will transform all at once. Then they have the distinction of being the only insects which molt after acquiring the adult form. When they first emerge from the Naiad skin they are covered completely by a thin semi-transparent coat. In this stage they are known as sub-images. Soon they shed this covering and fly away for their ephemeral existence. This adult life must be brief, for they have no functional mouth parts; in fact their alimentary canal has been developed into an air sac the better to float them. They join in a nuptial flight, lay their eggs and die, all in the course of a few hours. But thus their endless chain of life is maintained.

The Water Pennies

Clinging closely to the rocks is a little limped-like animal, much more resembling a crustacean or a chiton than an insect. The shape of the body is that of a slightly arched oval bordered by a delicate fringe. The resemblance to a chiton is further carried out in the tenacity with which it clings. Turning the insect over the three pairs of hooked legs are exposed as well as the fringe of bills along the abdomen. Thus is this little being adapted for living in this very strenuous environment. These are the larvae of a semi-aquatic beetle and are known as water pennies.

The giant boot-clad foot has done its damage and this little aquatic association has been disturbed but all around it are many others of the same sort, where all the life is all adapted to that particular little niche. Here are little tragedies and comedies, of which we know not, daily enacted.

AFIELD WITH THE NATURE GUIDES

MOUNTAIN LIONS AND DEER

On the evening of August 1, while located at Alder Creek checking station on the Wawona road to Yosemite, I had the following interesting experience:

The checking ranger, John Bingham and I were sitting in the checking house about 8:30 when we heard a sudden crashing of brush and the loud snorting of a deer. The deer ran out of hearing up over the mountain to the east, still snorting loudly. We remarked then that something must have given it a great fright. We thought it doubtful if a bear would scare one so or even a coyote or two.



A MOUNTAIN LION

About 2:30 I was dozing on the bed by the checking shack when I was rudely awakened by a great commotion of crashing brush and clattering hoofs. The deer at the salt rock scarcely a hundred feet from my bed had broken into a mad dash in every direction. I was not sure but I thought I heard other movements. I turned the powerful flashlight I had toward the salt rock but no eyes gleamed. Still I felt there must be something about but went back to sleep.

In the morning I walked over to the salt rock and there in the road were the tracks of two mountain lions. They had walked up and down the road, across it, stood and

looked apparently at me, gone to the salt rock and in fact had been all over the road. Across the creek they had walked down the road and back, and one had stretched out on the side of the road and apparently waited for deer, or perhaps rested. The imprint in the dust where his body rested was between three and four feet long. They were both small lions, presumably yearlings. It seemed they realized I could not see them, hence their coming in the open to within a hundred feet of me or less.—D. D. McLean.

BAND-TAILED PIGEONS FORAGING ON ACORNS

Right now one may observe the feeding habits of band-tailed pigeons to his heart's desire. Flocks of a hundred or more may be found in numerous places throughout the valley, and in the rich crop of acorns borne upon our black oaks. This morning (October 24), I chanced to be in the vicinity of Pigeon creek, near the base of El Capitan. If band-tailed pigeons have always frequented that region as they did this morning, it is not difficult to understand why Yosemite pioneers named the stream "Pigeon creek." The large oak trees were fairly alive with the birds.

My attention was drawn to their activity when I was yet some distance from them. Through the quiet forest came the explosive sounds of many dropping acorns, mingling with the boisterous flapping of wings. When the birds choose to be quiet, it is not easy to discern their drab forms, large though they be; when they are feeding in black oaks, however, they create a great din as they move from limb to limb, or flap their wings vigorously in attempts to balance themselves on delicate perches. The heavy loads of ripened acorns are loosed from their suspensions and come crashing through the limbs and dry leaves with all the seeming smashing power of coconuts. It is not the first time I have observed pigeons feeding, but my pulse quickened at this last experience quite as it did at the first. Perhaps there was something added today, inasmuch as a great female black bear with two cubs was found feeding on acorns, too, under the trees from which the pigeons were shaking the fruits. As I drew close, the mother grunted a sudden warning, the cubs shinned up a tree, and she bluffed me into a watchful retreat. My presence had disturbed the pigeons, too, and the great flock departed with much flapping of wings.

I seated myself some few rods

away to await their return, whereupon the mother bear directed her cubs to come to earth, and the three ambled out of sight. Only a few minutes elapsed before small flocks of pigeons began to return, and as I remained quiet, I soon witnessed the same active business of pigeon foraging.

Band-tailed pigeons may be seen in Yosemite at all times of the year. During the mating period they are less noticeable, but nevertheless present. In July, 1924, I located a band-tailed pigeon's nest in a California laurel tree about eight feet from the ground. It contained a well grown squab. This nesting site was in the deep notch between Mt. Broderick and Liberty Cap.—C. P. Russell.

* * *

THE ALLEN JUMPING MOUSE

Along the streams in Canadian and Hudsonian life zones of the Yosemite National Park, there is a mouse of very peculiar form, known as Allen jumping mouse. An extremely long pair of hind legs and an equally short pair of front legs, a tail five and a half inches long as compared with a body about four inches. Quite a combination, with the rusty buff sides, back brown streaked with buffy hairs, and the belly pure white. The hair is long, coarse and rather harsh.

The two middle toes of the hind foot are twice as long as the two others and the fifth is merely a stub. The tail is only sparsely pelaged and scaly. The ears are short and rounded. One Mr. Rett and I saw on the trail between Snow Flat and May Lake was rudely awakened by my stepping on the nest in which he was located. I planted my foot on a clump of grass and on raising it the mouse leaped out pell-mell, bounding about two feet high in a zig-zag course only to land under Rett's hands on one of his wild leaps. He seemed to be too much befuddled to know just where to go, not covering much territory in his leaps.

Mighty muscles for such a small animal are present in the hind legs and act as springs to carry the body up and forward on these leaps.

They are to be looked for at night on the grassy boulder-strewn slopes and meadows bordering streams at fairly high altitudes.—D. D. McLean.

* * *

A FIELD TRIP TO MAY LAKE

On August 28, 1926, Mr. Rett and the writer departed on a two-day trip to Snow Flat and May Lake, fifty-seven miles from the valley on the Tioga road.

We arrived at Snow Flat about 5:30 p. m. and proceeded to make camp and get ready for a cold night. The wind was blowing a gale from

the southwest, but it felt like it came from Alaska.

A large red-tailed hawk was seen over the meadow, presumably looking for Belding ground squirrels.

Numerous birds flitted about in lodge pole pines over camp and could be determined as Audubon warblers, Sierra juncos, mountain chickadees, slender-billed nuthatches, red-breasted nuthatches, Wright or Hammond fly catchers, wood pewees and cassin purple finches.

Tahoe chipmunks, chickarees and golden-mantled ground squirrels made up the majority of the mammals. Mountain beaver runways were seen along the bank of the stream, but no animals were noted.

We turned in for a good sleep and were awakened in the morning to the notes of Cassin purple finches. As we were cooking breakfast a male pine grosbeak came into the trees immediately over camp and called its sweet, soft notes.

On our way up to May Lake, about 3:45, we saw an Allen jumping mouse, which we caught easily. It was on a rocky slope covered with quantities of grass. The animal is certainly a marvelous jumper, leaping fully two feet high and nearly five feet ahead. In an Alpine hemlock thicket, just below the lake, we saw signs of white-tailed jackrabbits.

The southeastern side of the lake showed but little of interest and trout were scarce. However, at the north end and up the west side we heard and saw coneys and Alpine chipmunks. Clark nutcrackers were flying up to the white-barked pine thickets on the side of Mount Hoffman. At the southwest end of the lake we saw a beautiful red fox at the edge of one of the talus slopes. Two California gulls came to the lake for a short stay and continued onward. Hudsonian white-crowned sparrows, green-tailed towhees, Sierra juncos, siskins, cassin purple finches and western house wrens were scattered throughout the willow thickets near the lake.

Eastern brook trout abounded on the western side of the lake and bit with a vengeance for a while early in the morning. We were getting cold so started down from the lake about 2:20 in the afternoon and landed at the camp at 2:50. We ate lunch and were on our way home at 3:40. Reluctantly we said goodbye for another year and headed the car for Yosemite Valley.—D. D. McLean.

THE YOSEMITE NATURAL HISTORY ASSOCIATION ITS PURPOSES

1. To gather and disseminate information on the wild-life of the Sierras.
2. To develop and enlarge the Yosemite Museum (in co-operation with the National Park Service) and to establish subsidiary units, such as the Glacier Point lookout and branches of similar nature.
3. To promote the educational work of the Yosemite Nature Guide Service.
4. To publish (in co-operation with the U. S. National Park Service) "Yosemite Nature Notes".
5. To study living conditions, past and present, of the Indians of the Yosemite region.
6. To maintain in Yosemite Valley a library of historical, scientific, and popular interest.
7. To further scientific investigation along lines of greatest popular interest and to publish, from time to time, bulletins of non-technical nature.
8. To strictly limit the activities of the association to purposes which shall be scientific and educational, in order that the organization shall not be operated for profit.

FROM THE NATIONAL CONFERENCE ON OUT-DOOR RECREATION

Called by PRESIDENT COOLIDGE

"THAT THE CONFERENCE ENDORSE NATURE STUDY IN SCHOOLS AND THE EXTENSION OF THE NATURE STUDY IDEA TO EVERY AMERICAN SCHOOL AND FAMILY; THAT THE ESTABLISHMENT OF MUSEUMS OF NATURAL HISTORY IN NATIONAL PARKS WILL INCREASE THE EDUCATIONAL RECREATIONAL VALUE OF THE PARKS".—Resolution of the Conference.



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Dan Anderson