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Seasonal Progression On Mt. Dana

RANGER-NATURALIST CARL SHARSMITH

The first naturalist-conducted climb of each season up Mount Dana, in early July, is always a particularly interesting one. Every climb of this characterful mountain contains surprises but in early summer none is greater than the resurrection of the rich alpine flora.

As one starts the ascent of the mountain the plants of the lower slopes are found still dormant, in a condition of early spring. Just a few green points here and there give promise of the later rich gardens of flowers for which the mountain is justly famous. Winter seems to have abandoned this section but a short time. Evidences of heavy snows and winter storms are to be seen in the battered condition of the willows which line the many rills. Only the sturdy, thickset white-barked pines seem quite unscathed. The beautiful, soft grasses of Dana Meadows, which in later summer cover the ground like a fine purple mist, are just emerging. Other plants, also, are just beginning to appear. Seasonal vegetation of this whole lower western slope is only on the verge of recovery by late June or early July.

Above timberline, however, spring is rife. Tiny alpine flowers are in rich profusion and almost at the peak of bloom. The diminutive, charming moss phlox (Phlox douglasii Hook. var caespitosa Mason) is probably the most abundant flower, the tiny, white starlike blossoms crowding the spaces between the rocks in many places, and emitting a delicate perfume. At 12,000 feet the tiny yellow Draba (Draba lemmonii Wats) becames plentiful, continuing upward until the lovely Polemonium (Polemonium confertum Gray var eximium Jepson) is met at nearly 13,000 feet altitude. Here, almost on the very summit rocks, the deep azure blue of their flowers is rapidly approaching perfection.

Such great differences in seasonal advancement of the flowers above and below timberline is contrary to what one usually expects, and calls for an explanation. A combination of the factors of temperature, precipitation and exposure, together with the character of alpine plants in general seems to explain condition most reasonably.

Among hilly and mountainous regions the phenomenon of inversion of temperature must always be considered; the tendency for cool, heavy air to settle down and displace upward the warmer, lighter air. Doubtless such conditions exist on Mount Dana during windless intervals. Ordinarily the higher the altitude, the colder the temperature, but with this inversion phenomenon the normal condition is reversed.

The prevalence of lingering banks of snow on the lower slopes of the mountain may also influence the retardation of plant growth there. The decreasing velocity of the wind and the more sheltered conditions of the lower slopes are factors probably responsible for the longer retention of snow.

The west slope of the mountain, the one most carefully explored, is everywhere equally exposed to the sun, the mountain being quite isolated from this side. Almost the same degree of slope exists along the whole mountain on this side, except for the one large bench near the top, and the angle of the inclination of the sun's rays is therefore approximately the same from top to bottom. Thus the differential influence of the sun at lower and higher altitudes in respect to the plant growth can be discounted. The influences of cold water cannot be considered, either, because it is everywhere abundant. Icy cold streamlets are plentiful even on the upper slopes because of the occasional banks of snow existing there. The screening effect of the trees in the timberline zone would, if anything, have an equalizing effect and tend to maintain more equal temperatures than on the exposed slopes above.

Except for the fact that the more strictly alpine plants would make quicker use of the favorable temperatures, the more advanced flowering condition of the alpine plants of the mountain seems to be related to the two forces referred to above, namely, inversion of temperatures (the tendency of the colder, heavier air to flow downward and settle near the base of the mountain) and the persistence of heavy banks of snow on the lower slopes with its retarding effects there.

MUSEUM NATURE GARDEN

During the month of August five different species of humming birds were represented in the Yosemite Museum nature garden. There were battles for possession of the territory among the different species. The black-chinned hummer lasted only one day, and the big green Annas left early in the month, the male Rufous hummers went along with the Annas. For three days a beautiful male Allen hummingbird held his hunting ground on his favorite perch, and then disappeared as mysteriously as he came. All month calliope hummingbirds were to be seen in the garden. Some days there would be a lone bird, other days three or four. Somehow these little hummers had no established claims, they came and they went and were not much bothered by other hummers until late in the month when a wave of female Rufous swept into the garden. These females took possession of the garden and when there were no calliope hummers poaching on their preserves they fought among themselves.—Enid Michael.

Mountain Weasel Makes A Kill

By RANGER NATURALIST HERBERT O'NEAL

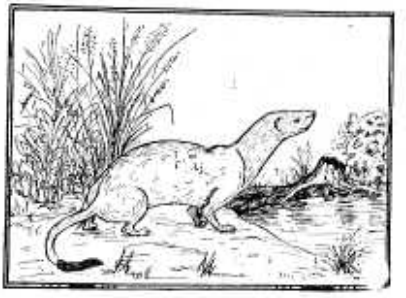
As the shadows lengthened at the lookout station on Glacier Point the conversation lulled. Even the Tahoe chipmunk eating from a pile of salted peanuts on the stone parapet a few feet away lacked his usual zest. Quite and harmony prevailed.

Suddenly a small brown head with large eyes and rounded ears, peeked over the edge of the parapet behind the chipmunk. Instantly this was followed by an almost grotesquely elongated body which was hurled at the chipmunk. Clasping its prey with its front legs the blood-thirsty killer bit its victim through the neck near the head. There was a slight crunching sound as of severed bone. The hapless chipmunk gave a slight squeak, a feeble kick, a few quivers and then was carried away by the neck. So large was the kill in proportion to the weasel that it could only be prevented from dragging by being held aloft by the extended neck of the killer.

All happened so quietly and quickly we were amazed. Our distance was only a few feet away. We were clearly in view, but at no time was the least fear shown of us.

LIZARD MORE FORTUNATE

A few days later we saw a bounding brown streak flash over the rocks below. A few feet ahead was seen the dark gray of a blue-bellied lizard. It was fully warmed up to the occasion. With body held high and tail well up this usually sluggish animal showed surprising speed. It darted into a crevice in a rock where its enemy could not follow. Its prey lost, the weasel, with head erect, ran back and forth over the rock peering here and there for its victim. Evidently the mental strain was too much for the limited capacity of the lizard. Out it dashed with the weasel in full pursuit. The distance between them gradually lessened until it seemed as if the weasel would be the victor. Then into a small crack in the stone wall disappeared the lizard and the chase was over.



The beauty of the color of the weasel, his utter fearlessness, his long, lithe body, propelled forward in bounds by such short legs, and his general alertness and animation make him an animal of distinction. Here is a fighter who by his fearlessness, strength and intelligence is more than a match for any his size.

BRIEF NOTES

While on a pre-breakfast hike near the southern park boundary, July 14, I observed a mother mountain quail with a number of babies. They took to cover so quickly under the prostrate ceanothus that no check could be made on the number of young.

Yosemite First Seen One Hundred Years Ago

By RANGER NATURALIST REYNOLD E. CARLSON

October, 1933, probably marks the 100th anniversary of the discovery of Yosemite. Most people give the credit for the discovery to the Mariposa Battalion in the year 1851, but in the year 1833 the valley was very probably seen, although not entered, by the Joseph Walker party of fur traders and trappers. This party was undoubtedly the first to ever traverse what is now the Yosemite National Park, the first to see the Sequoia gigantea, and very probably the first to look down into the Yosemite Valley.

Most of the areas now set aside as national parks were seen first by fur trappers. In the early part of the 19th century the high price of pelts led to the organizing of fur trapping and trading companies that brought great numbers of men into the trans Mississippi west. As beaver became scarcer in the streams nearer St. Louis, the center of this early fur trade, parties pushed further and further into the Rockies in search of new untrapped areas. These men entered the Yellowstone region and explored the drainage basin of the Columbia river. The Great Basin in the Southwest was claimed by Spain, and its arid nature prevented its early exploration so that it was left as the last section to be penetrated by these Yankee traders and trappers.

In the year 1832 Captain Bonneville organized a new trapping company and brought his men into the Rocky mountains. He found that most of the streams in the Rockies were already exhausted and so he appointed Joseph Redford Walker to lead a party of some 40 men into the Great Basin and possibly into California in search of virgin streams.

This first party left the Rocky mountains in the summer of the year 1833. The route across Nevada was substantially that followed by the present Union Pacific rail line.

On reaching the sink of the Humboldt, Walker's party pushed southwest. Walker was looking for some easy pass across the mountains into California. In his search he probably followed what is now Walker river for some distance but failed to find any satisfactory route across the range. On reaching the Mono lake country Walker realized that if a crossing was to be made before the snows began the attempt would have to be made immediately. He succeeded in getting some of the Mono Indians to show him a route that was often used by them in crossing the range.

These Indians led him up through Bloody canyon and over Mono Pass into the Tuolumne Meadows region. The party pushed west, keeping to the dividing ridge between the Tuolumne and the Merced. Snow fell and travel became extremely difficult. Game was scarce in the high mountains and horse flesh had to be used for food. On reaching the Yosemite valley region Zenas Leonard, the clerk of the party, says: "Here we began to encounter in our path many small streams which would shoot out from under these high snow banks, and after running a short distance in deep chasms, which they have, through ages, cut in the rocks, precipitate themselves from one lofty precipice to another, until they are exhausted in rain below. Some of these precipices appeared to us to be more than a mile high."

This statement, as well as others made in this same diary leads us to believe that some of the members of the party probably stood on the brink of Yosemite Falls and looked down into Yosemite Valley.

On Walker's tombstone in Martinez we find this inscription "Camped at Yosemite Nov 13, 1833." From all the data that has been gathered, however, there is no evidence that Walker actually entered the valley; and this tombstone reference significantly uses the word "at" Yosemite rather than "in" Yosemite. The date given here is also very probably in error, as Walker's party was reported in the San Joaquin valley at an earlier date than November 13. It was probably during the later part of October or the very early part of November that Walker and his trappers camped above the rim of Yosemite valley.

Walker did not make his discovery of the valley known. He and his party were more concerned with finding their way out of the mountains than stopping to admire the scenery along the way. It remained for the Mariposa battalion in the year 1851 to make the valley known and to be the first white men to actually descend to the valley floor.

TURKEY VULTURES AT BIG TREES

By Robert P. Beal, Ranger Naturalist

The turkey vulture is a rare visitor to the Yosemite region, only having been noted twice in "Birds of Yosemite," having been seen once in the valley and once on Mt. Dana.

In the middle of July two turkey vultures were noted a short distance west of the Mariposa Grove Ranger Station at an elevation of about 5700 feet. When first seen they were sitting in the top of a tall, dead pine and, on becoming alarmed, flew with slow wing beats southward toward the Sierra National Forest.

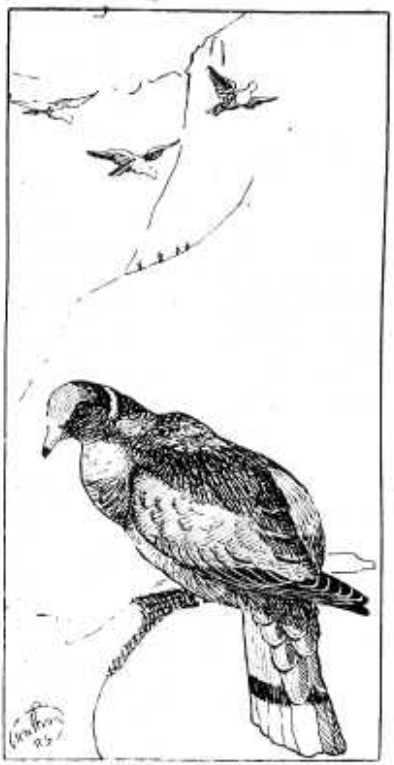
EAGLES

Golden eagles are often observed around Yosemite Valley, but it is not often that they are observed at close range by any large group of people. Twice this summer, however, eagles have been observed at close range. On July 4 an eagle flew past the tunnel parking area only a few hundred feet or so away from a group of some 75 people. Another eagle was observed shortly afterwards by the auto caravan while stopped at Rocky Point. Here again the bird was observed by a large number of people at fairly close range. R. E. Carlson

BAND-TAILED PIGEON NEST

By Ranger Naturalist Craig Thomas

On a nature walk July 11, just across the river from Camp 14 and near the stables, we were told by some campers of a pair of large birds building a nest in the bent and cracked stub of a black oak about 45 feet from the ground. The birds were easily identified as band tailed pigeons as they flew back and forth from the nest tree to a yellow pine near by. When the tail



was spread the wide white margin at the end of the tail showed plainly. One of the birds, perhaps the female, remained on the nest, while the other flew to the pine tree, broke off small twigs and carried them to the nest. The nest was a loosely constructed, bulky affair, composed almost entirely of pine twigs. Each twig was broken from the dead limb of some tree by the strong bill of the piegon. The bird knows this insures a cleaner nest than would be possible if sticks were taken from the ground and also less conspicuous. It looked as though this nest might be the second season it was used, at least, judging from the size and worn appearance of the lower part of the nest.

STORM ON MOUNT DANA

By M. E. Beatty, Asst. Park Naturalist

While eating lunch on top of Mount Dana, 13,050 feet elevation, August 23, 1933, my six-day hiking party witnessed a rather unusual weather display. A storm was gathering over the High Sierra and black clouds filled the sky over the whole area. On one particularly strong gust of wind all our loose papers and empty lunch boxes were carried off the mountain top. The peculiar thing was that instead of being blown to one side, the papers were carried up directly over our heads, a strong ascending air current lifting them until they were mere specks and then finally carrying them from our sight. We could see rain falling in torrents to the south and west of us, but we seemed to be on an isolated bone dry island. A few hail stones dropped around us before the storm blew over, but we enjoyed the full view of the storm without the usual drenching.

CALIFORNIA BADGER

By Ranger Sam King

Did you ever endeavor to rub elbows with a California badger? Well, don't do it; though he is interesting to look at, not so to contact.

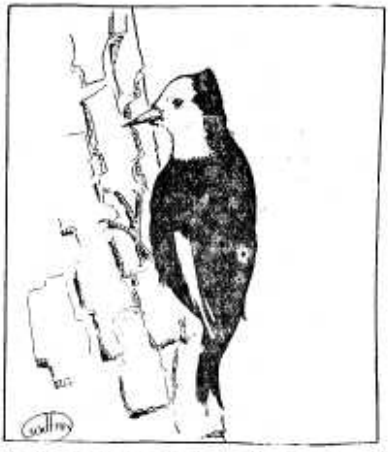
On the morning of July 10, while returning from an early morning fish plant on upper Alder creek, I chanced upon the first badger I have ever seen at close range. I was driving along at about 20 miles per hour in one of Uncle Sam's puddle-jumpers, when I was suddenly conscious of the fact that one of the rear tires was flat. When I applied the brakes to stop, they gave forth a peculiar high-pitched squeak. At the same instant, what came tumbling down the bank, but a full grown California badger, ready for any emergency! Apparently the noise from the brakes had awakened him from an otherwise peaceful slumber.

Here was a chance for a real picture, but, alas, my camera was at home. My greatest surprise was to learn that a badger moves in a sluggish manner, probably due to his very short legs. He allowed me to follow him to within three feet then he would turn, snarl like a dog and show his teeth. Maybe he was proud of them. He had a right to be for they certainly were formidable-looking. If you ever see one, he can be identified by the very black stripe which runs from the nose upward between the ears to the back of his head. In addition to this, his feet are black, while his body fur is comparable to a gray fox in color. He ranges in California, from the foothills to timber line. One thing is sure, if you see one, you will not attempt to pick him up; if you do, you will wear wound stripes for some time.

WHITE-HEADED WOODPECKERS NEST IN LOG OF BIG TREE

By Robert P. Beal, Ranger Naturalist

The Big Tree is noted for its antiquity and size, but not for being the home of our forest birds and animals. However, near the American Legion tree in the Mariposa Grove a pair of white-headed woodpeckers have made their home and raised a brood of young.



Attention was first called to the nest by the calling of the young. The nest was found in the butt end of a fallen sequoia. The tree had been split in falling, the split being vertical and one side having fallen away. The woodpeckers had excavated a cavity on the upper half of the vertical face and in the exposed heartwood. The young were fully feathered when first seen and were quite fearless. They continued to call for food when approached and photographed at a distance of five feet, the head of one of the youngsters projecting from the entry hole most of the time. The parents were observed feeding the young, which left the nest a few days after discovery.

PROTECTING BIRDS FROM WINDOWS

By Ranger Naturalist A. E. Borell

Early this spring a bird-feeding table was erected in the garden at the museum on the floor of the valley. This proved very popular with the birds and at times there were as many as 50 birds of eight species about the feeding station. The table was located 15 feet from a large window on the north side of the museum. Directly opposite this window on the other side of the building was another window of similar size. Birds flying up from the table apparently looked through the two windows and thinking this an open passageway flew directly into the glass. During the first three weeks at least 10 birds struck the window and five of these were killed. California woodpeckers, blue-fronted jays, Hudsonian white-crowned sparrows, Western tanagers, juncos, black-headed grosbeaks, Brewer blackbirds, red-winged blackbirds and Western robins came to the table in numbers. However, only the two species of blackbirds, the black-headed grosbeaks and the robins were known to strike the glass.

CORDS STOP SLAUGHTER

The mortality was so high that something had to be done to protect the birds, and the first experiment was successful. Three cords were stretched from the top of the window to the bottom. These were about two feet apart and about three feet from the glass. Through the next three months only two birds were known to strike the window.

It is quite a common thing for large windows to result in the death of many birds. It is likely that the use of cords as described above would at least reduce the number of birds killed in this manner. The unattractiveness of the cords can be reduced by using hard-finished, colored cords.

NOTELETS

GRAY SQUIRRELS

California gray squirrels are now commonly seen in the territory west of the park boundary and occasionally a few are observed on the floor of Yosemite Valley between Arch Rock and El Capitan. On September 23, 1933, one was observed on the south side of the valley near the bear pits and it is hoped that they will soon be seen in the upper end of the valley. M. E. Beatty

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Though deer are not often found in artificially lighted places, a number of reports of deer entering the new Wawona tunnel at night have been received. On May 30 the writer observed two deer in the tunnel at about 8 p. m. One had entered the lighted tunnel by way of the west portal and had reached the first adit. The other deer was observed near the east end of the tunnel about 200 feet from the entrance. R. E. Carlson

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A blue-fronted jay chasing a chickaree squirrel was one of the sights to greet a party on a nature walk from Camp Curry recently. The bird would fly at the squirrel and stop; then the whole performance would be repeated. The jay's action could not be accounted for by a desire for food, for there seemed to be nothing in the squirrel's mouth. It may have been that the jay was trying to protect its nest, which was in a nearby tree R.E.C.