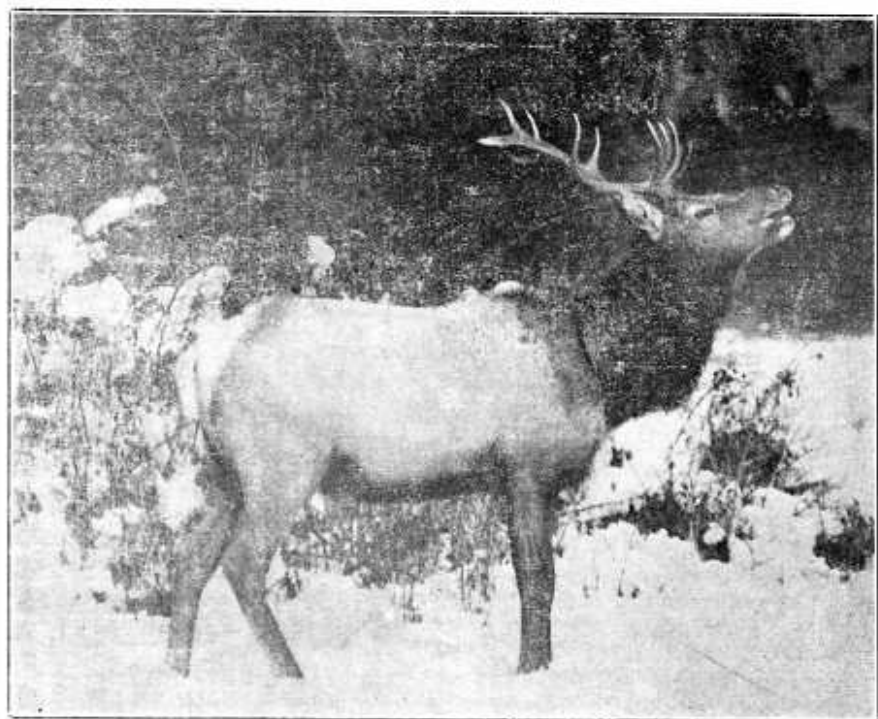


# YOSEMITE NATURE NOTES



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January, 1933

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# Yosemite Nature Notes

THE PUBLICATION OF  
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## Signatures of Four Presidents and Other Notables on Hotel Register Loaned Museum

By C. A. Harwell, Park Naturalist

The Yosemite Museum Library has in its possession either as gifts or loans many of the early hotel and camp registers of the park. We have the complete register of La Casa Nevada, the famous hotel run by the Snows between Vernal and Nevada Falls from 1870 to 1890, of Peregoy's Hotel, several from the old Sentinel Hotel and numerous registers of early-day campers and park visitors. We have just received as a loan from Mr. William C. Utter, 1423 Third avenue, Oakland, Calif., what I consider the most valuable one of all. It is the Great Register in which 18,000 visitors to the old Cosmopolitan House signed their names and made comments on their visits.

This register was originated in 1873 by C. E. Smith, who built and started operating the Cosmopolitan House that year. It seems every tourist just had to visit the Cosmopolitan. Bathtubs, brought over long miles of trails on pack horses, were very necessary things in those early, dusty days, when sprinkling of roads was rare in the mountains, and when oiling was unheard of. Smith had the only bathtubs in the valley. He had

other reasons for fame. The Cosmopolitan was a barber shop, bath house, saloon and social center all in one.

It may be some came just to see this famous register, to see the signatures of the famous people and to inscribe their own. This book 24 inches by 18 inches by 8 inches containing 800 pages was especially made for Mr. Smith by H. S. Crocker Company of San Francisco for this purpose at a cost of \$500. It is heavily morocco bound, silver plated and each page is printed so that visitors could register by states and foreign countries. Space was provided for ample remarks.

### THE GREAT AND NEAR GREAT

Four United States presidents signed their names—James A. Garfield, U. S. Grant, R. B. Hayes, and Theodore Roosevelt. Garfield signed May 15, 1875, and inscribed: "No one can thoughtfully study the valley and its surroundings without being broader minded thereafter. J. A. G." Garfield was then a United States congressman. Many distinguished generals as well as foreign lords, counts and

dukes, including Duke Alex of Russia, registered. Lily Langtry, the great actress of London, signed her name with her special party, June 30, 1884.

On page 57, under date of June 18, 1874, a party of 15 registered from Coulterville. T. McLean inscribed the following in the register: "The first wagon road leading into Yosemite Valley (via Coulterville) was built by Mr. T. McLean and completed on June 18, 1874—on that day the builder and his family were the first persons to ride into the Great Valley on wheels. They with their friends named in this list have ridden in carriages from Coulterville to Yosemite. The event—a memorable one for the valley—was celebrated by a procession and orations, bonfires, firing of cannons and general rejoicing." T. McLean, Mary E. McLean, Sterling McLean, Miss Helen McLean, Elizabeth M. Mc-

Lean, George W. Coulter, Mrs. George W. Coulter, Miss Anna M. Coulter, Daniel Wagner, Mrs. C. H. Wagner, G. Douglas, Hanna P. Douglas, N. Locaidea Woodward, Emily C. Austin, Mrs. F. W. Stow. Several of these families are still well represented in Coulterville and in Mariposa county.

#### HISTORICAL MATERIAL

This valuable old register is very well preserved though the State and county index sheets are very much worn by use. This is its first return to the park since sometime in the nineties when Capt. E. S. Utter, who had purchased it and the Cosmopolitan House from Smith, took it to Oakland with him where for a while it was exhibited at the Chamber of Commerce. It contains much of historical importance to Yosemite and we feel fortunate that we were able to secure it for exhibit at our museum. No former historian has had access to it.

## Another Argument for Careful Game Management

By C. C. PRESNALL, Junior Park Naturalist

The relative scarcity of game birds and animals today as compared with the abundance of past years is a subject of vital interest to sportsmen, who often maintain that predators have caused the damage rather than poorly regulated hunting. The fallacy of this contention, at least in the case of quail, is shown by some records recently brought to light in Yosemite National Park.

No one questions but that quail (both mountain and valley) have greatly decreased in numbers during the last two decades, and some hunters argue that the decrease, in areas open to hunting, has been but

little greater than in the parts where predators are the only enemy of the quail. In the open areas surrounding Yosemite it is the consensus of opinion that quail have decreased from 50 to 80 per cent during the last 20 years, and inside the park some observers have estimated a decrease of 30 to 50 per cent. In direct opposition to this latter estimate I submit the following statistics to show that quail are holding their own inside the park.

#### QUAIL HOLD OWN, BEARS INCREASE

In 1912 daily records were kept of all game (deer, bear, quail and

grouse) seen by the cavalry patrols extending from one to 15 miles out from Hetch Hetchy, covering the period from July 1 to October 15. An average of 28 quail per week were seen during that time, the maximum for any one week was 129, during the third week of September, and the maximum for one day was 50, during the same week.

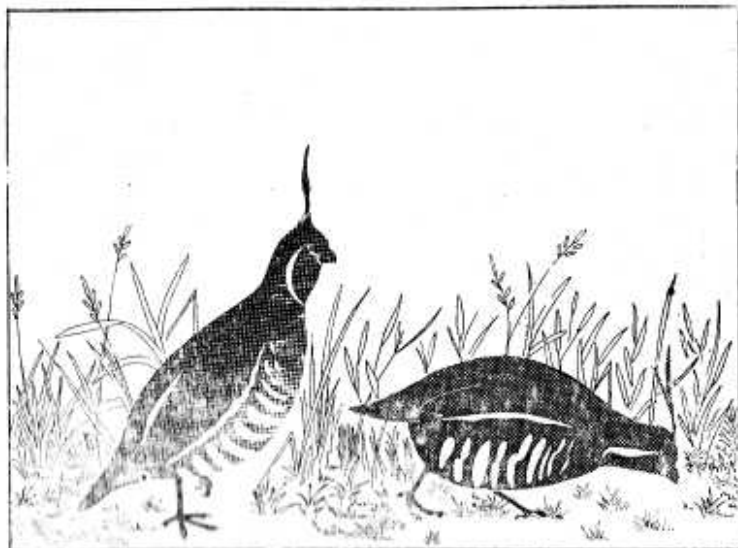
Conversation with rangers stationed in that area during the past two years indicate that the numbers today are approximately equal to this record of 20 years ago. It is interesting to note that the grouse population of 1912 was about equal to the present, the deer population was noticeably greater (explained by the foot and mouth epidemic) and the bear population was much less than now—scarcely over one bear per week.

#### FIGURES NOT INFALLIBLE

It can be argued that these figures prove nothing, since annual

fluctuations in quail population are quite large and 1912 might have been a poor year, but the chances are equal that it was a good year. The years 1931 and 1932 constitute an average, since quail were fairly abundant in 1931 and somewhat scarce in 1932. Again it can be argued that observations were carelessly made, but the same could be said of estimates offered on either side. The fact remains that this is a definite record, carefully kept each week, as contrasted with estimates based upon general memories of bygone years.

We will need many carefully kept records covering a long period of time before we can formulate wise game management policies, but the foregoing isolated record is offered for what it is worth toward proving that the State-wide decrease in quail has not been due to predatory birds and animals, but to inadequate regulation of shooting.



	1640	1660	1680	1700	1720	1740	1760	1780	1800	1820	1840	1860	1880
Cedar A													
Sugar Pine A													
Sequoia A													
Sequoia B													
Sequoia C													
Sequoia D													
Sequoia E													
Sequoia F													
Sequoia G													
Sequoia H													
Havorford Tree													
Massachusetts													
Fallen Giant													Fell 1873
Elephants Foot													Fell in 1817
Cut Sequoia													Died 1817, cut in the seventies

**TABLE OF FIRES AND FIRE SCARS IN THE MARIPOSA GROVE**

Dotted lines indicate fires, which burned various trees as shown by the short heavy lines.

## Translating the Autobiography of a Big Tree

By C. C. PRESNALL, Junior Park Naturalist

Two features of the Mariposa Grove of Big Trees have caused visitors to ask questions which we were never able to answer until very recently.

The questions are: "When were the fires that caused the huge scars on nearly every tree?" and "How long have the dead trees in the grove, such as the Fallen Monarch or the Elephant's Foot, been lying on the ground?" One man's guess was as good as another's until November of this year, when some very interesting tree research enabled us to say that the most severe fire occurred in 1710, and that the Elephant's Foot fell in 1817. Back of this simple statement is an interesting story of our efforts to translate the autobiography that is written in each big tree.

The dating of events that occurred before the advent of white men to the grove involves much painstaking work, and was only undertaken as the result of a series of events that culminated in the cutting of a roadway through the fallen Elephant's Foot. When this roadway was cut, Park Superintendent Thomson observed that the necessary mutilation of the dead tree could be turned to good advantage by converting it into an attractive exhibit, especially since it was close to the new Big Trees Lodge, where it would be seen by all. Hence it was that a short time later I went to the grove to figure out ways and means of converting a giant saw log into an educational exhibit.

Several dozens of tourists stopped to look at the tree while I was puzzling over it. They asked me

questions. "How old is this tree?" "When did it fall?" "What made it fall?" I could not answer them. Eureka! Why not learn the answers, write them on an attractive sign and post the sign on the cut end of the log. The log itself was an exhibit, and in the log were contained the answers to the questions concerning it.

### SEVERAL FIRES REVEALED

To answer the questions it was necessary to carefully count on many trees the annual growth rings exposed by old fire scars. By cutting off the charcoal and using a magnifying glass, it was possible not only to count the rings but also to detect the location of older fire scars that had been partially burned over by the most recent one. From this it was learned that most of the sequoias had been attacked by from two to four different fires, and the intervals between these fires were readily shown by the annual rings. Yet the fires could not be accurately dated until the annual rings had been counted right out to the bark. This presented difficulties, since the most recent scars were always overlaid with thick layers of new wood into which it would be unwise to make mutilating cuts that would permit ring counts.

To count the rings without damaging the trees I used an extra long increment borer of small caliber, which the California Forest Experiment Station kindly loaned us. An increment borer works on the diamond drill principle and is simply a boring machine that makes a small hole from which can be removed a small core of wood showing the annual growth ring.

The hole, only 10 millimeters in diameter, is tightly plugged after removing the core, and does not damage or mutilate the tree. The cores also show fire scars very plainly, and by counting the rings to the first scar we could accurately date all the fires that had attacked any particular tree.

#### EVIDENCE OF 15 TREES

Rings were counted on 15 trees in various parts of the grove, from 6 to 20 counts being made on each tree to eliminate errors. From this I determined the dates of 12 different fires, as shown in the accompanying table. Several fires were too ancient to record in this table. For instance, Sequoia C showed a large scar in 1622 and the Havorford tree sustained a bad burn about 450 A. D. The tree was about 150 years old at the time. The fire of 1710 seemed to be most widespread, probably damaging all the trees in the grove, but I found scars of this fire in only five of the 15 trees studied, perhaps because subsequent fires had obscured them in the others. It is interesting to note that scars from this fire were also found on the trees in the Fresno group, five miles south of the Mariposa grove.

Dating the fall of dead trees was a more difficult task, but was made possible by a comparison of "fire intervals" on a dead tree with dated fire intervals on near-by living trees. This is best explained by describing an actual case. Counting the annual rings between fire scars on the Elephant's Foot gave the following sequence of fire intervals—38, 52, 18 and 15. Consulting the table of dated fire intervals on living trees we find that 1742, 1760 and 1775, giving intervals of 18 and 15 years, match with the last half of

our sequence. Having thus learned the dates of the scars on the Elephant's Foot, I counted the rings intervening between its most recent scar and the outside of the tree and found that interval to be 42, thus dating the death of the tree in 1817. I then counted the rings on the stump of a tree that stood directly in the path of the Elephant's Foot (designated "cut Sequoia" in the table). This tree appeared to have been killed by the fall of the Elephant's Foot, but had not fallen until cut in the '70s. In the stump of this tree I found three well defined fire scars, with intervals to its death as follows—38, 52 and 75. These intervals exactly match the Elephant's Foot to the year of its death—38, 52 and 75 (18 plus 15 plus 42), showing that we were correct in surmising that the fall of the Elephant's Foot killed this cut sequoia.

Turning now to the Fallen Giant, near our museum at the grove, we learn from history that it was blown down during a storm in the early '70s, and our method of matching fire scars shows 1873 to be the exact year. Further reference to the table shows that the Elephant's Foot did not fall during a fire, but perhaps met its death in a storm, as did the Fallen Giant, a deduction further strengthened by the total lack of burns on the sapwood and bark of the Elephant's Foot.

#### MONARCH TO BE STUDIED

It is quite apparent that the death of a tree cannot be dated unless its sapwood is sufficiently well preserved to permit a ring count. Hence, it is doubtful whether the Fallen Monarch can be dated, but we intend next spring to make a very careful study of the Monarch and other trees not yet studied, etc.



as to learn all we can about the interesting autobiography which the Big Trees have written. As rapidly as we can read the Big Tree autobiography we will translate it for others to see. The first chapter of the translation will be available to Mariposa Grove visitors next year in the form of a rustic sign posted on the cut end of the Elephant's Foot. The sign will read something

like this:

#### ELEPHANT'S FOOT

This tree fell in 1817, due to previous fire injuries. The burns at the base of this tree and others in the grove were caused by many early-day fires, the most severe being in 1710, 1742 and 1775 (see explanation in Mariposa Grove Museum).

Approximate age when killed—870 years.

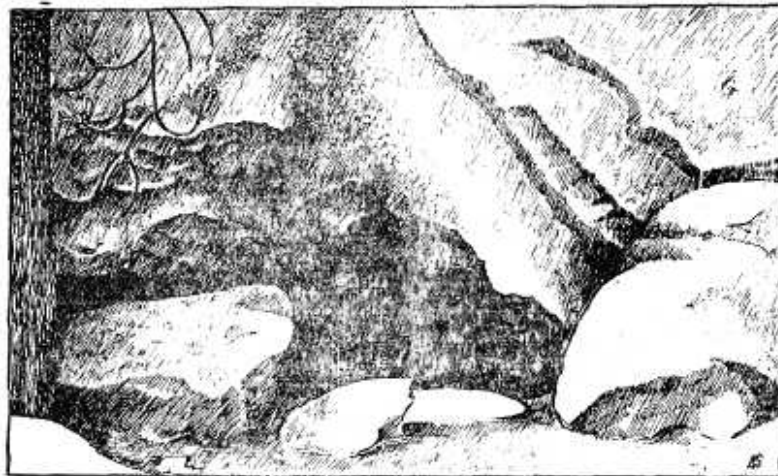
## More Indian Caves Discovered

By M. E. BEATTY, Assistant Park Naturalist

Much interest has always been shown in our Indian caves, located in the east end of the valley near the base of Washington Column. They are easily reached by car and in summer prove a popular stop for our auto caravan and our guided walks from Camp Curry. These Indian caves were discovered by the Mariposa Battalion in March, 1851, on the first entry of the valley by whites. They consist of a

lower and upper cave both formed by large blocks of granite that fell hundreds of years ago from Washington Column, wedging themselves to form caves. This was the Indian village site known as Hol-low or Lak-koo-hah. The name means "to come out," but the reference is not clear.

It is believed that the Indians would use the caves as hiding places from their enemies and as



Entrance to lower Indian Cave



shelters connected with their village life. Several baskets and fragments of baskets were found hidden away among the rocks in the upper cave by a tourist in the early nineties. Circular depressions in the ground in front of the caves mark the sites of their o-chums or bark houses. Mortar holes in a great flat granite rock testify to the fact that the Indians lived there many years before the coming of white men. This was the kitchen of the squaws, where they pounded acorns for bread. Indian writings were found on the wall of the lower cave, but the fires of careless wiener roast parties destroyed them a few winters ago.

#### WIDE USE BELIEVED

The recent discovery of two other caves used by the Indians lead us to believe their use was more prevalent than we heretofore imagined. From recent examinations, we believe caves were commonly used by Indians not only as hiding places but as storehouses and shelters as well.

One of these caves was discovered by workmen this past summer inside the Ahwahnee grounds. It yielded a hunting bow in good state of preservation except for the ends. As this cave was unknown to even our oldest Indian we can assume that the bow antedates the coming of white men to Yosemite. This cave can be entered only by crawling on hands and knees. Three mortar holes were found in a granite slab at the center of the cave with pounding rocks still in place. Further excavations which we plan to make may bring other specimens of historic value to light.

The third cave location has been known to a few whites and some

of the older Indians for a number of years but has only come to the attention of the museum staff recently. This cave is located in the talus slopes, as are the others. It is near the trail leading to the lower Yosemite Fall, a short distance from the auto loop. A splendid set of mortar holes in a granite slab at the cave entrance gives the clue to its one-time use by Indians. Johnny Brown, one of our oldest Yosemite-born Indians, accompanied the writer and Harry Best to investigate this cave.

#### AN ABORIGINE'S MEMORIES

Johnny recalled that a long time ago Sally Ann used to carry her baskets of acorns from her mother's cabin near the present lodge location up to this cave for pounding. This cave is near the village site known as Koom-ah-ne, one of the largest and most important of the many villages on the floor of the valley. This village was the home of Chief Tenaya, the last chief of the Yosemitees. He lived near the present site of the Yosemite Lodge. A second inclosed inner cave connects the main cave by means of a narrow opening and furnishes an ideal hideaway. From this inner cave a natural narrow shaft descends some 100 feet under ground coming out some distance from the original cave opening. If one were prone to romance, it would be easy to picture the Indians using this inner cave as a hide-out from their enemies and the secret exit a means of retreat in case their hide-out was discovered.

At least, these new caves furnish a new light on the early history of Yosemite and of the little known life of the valley's first inhabitants.



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Dan Anderson