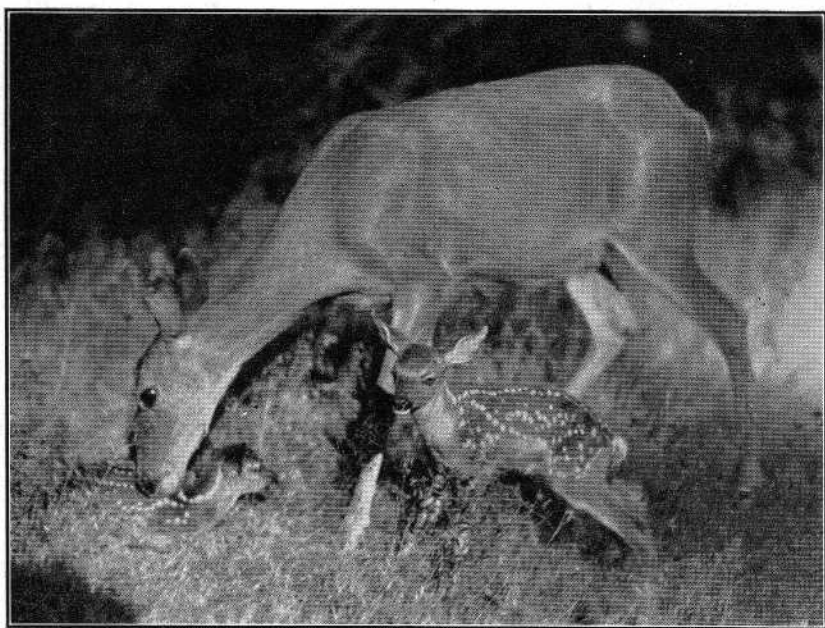


# YOSEMITE NATURE NOTES

Vol. XXVI

JUNE, 1947

No. 6



*June Is Fawn Time*

*Photo by Harwell*

# Yosemite Nature Notes

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

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## A SYMPHONY OF SPRING IN YOSEMITE By Donald Edward McHenry, Park Naturalist

Nowhere does nature express herself with more varied feeling than in Yosemite. In her boldly sculptured crags and pinnacles is arrested the poetry of time, space and form. This is the wilderness setting in which is presented, year after year, one of the grandest symphonies ever conceived in the mind of the Creator.

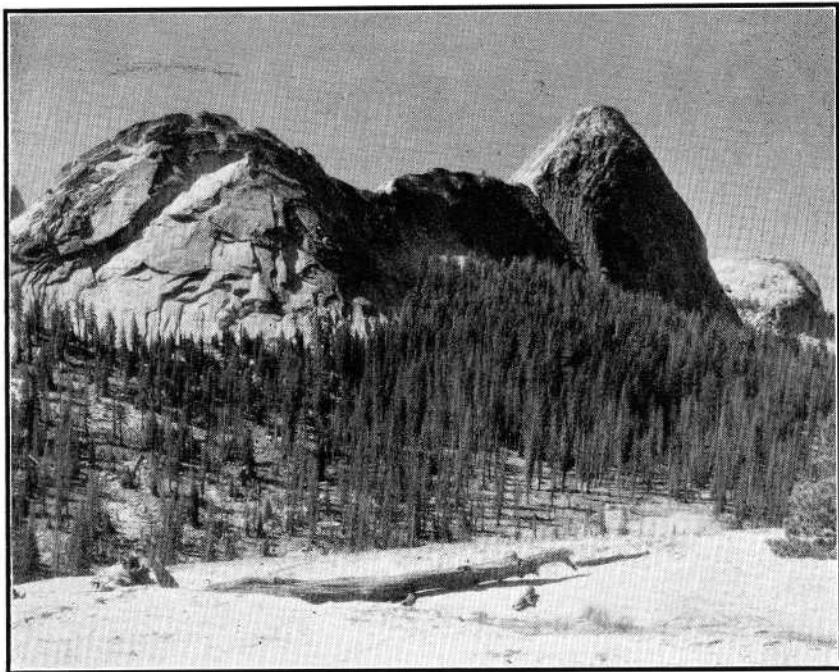
The score is written for the song of the hermit thrush, the water ouzel or Audubon's warbler; for the padded tread of the bear, the tinkling splash of the otter, the nocturnal slap of the beaver's tail on the inky mirror of his lake home. Mighty indeed is the thunderous boom of the deep bass of Yosemite Falls, leaping exaltingly from the cliffs a half mile above to vanish in mist among the rocks below. Crescendo and diminuendo are found in the surge and passing of the

color of massive displays of flowers as spring climbs higher and higher, finally dissipating itself among the snow-clad peaks of the High Sierras leaving behind a trail of green verdure carpeting valley, canyon and cliff. The graceful leap of the deer is the wave of the maestro's baton; the harmony and theme, eternity.

This is the magnificent symphony of nature in the midst of which visitors are privileged to live a few fleeting moments of enjoyment. All about is the grandeur of Yosemite National Park. Each living form, every rock with its infinite story is the framework in which this ageless symphony of the hills blends with the memory of Brahms' lyric Fourth Symphony, Beethoven's mighty Ninth or Handel's "Messiah." Its melody sweeps across all barriers of timeless eons.

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Footnote: California golden beaver (*Castor canadensis subauratus*) was recently observed on Ackerson Creek one-half mile outside the park boundary.



*Fairview Dome, Tuolumne Meadows*

## **WHEN EARLY SPRING COMES TO TUOLUMNE**

**By Carl W. Sharsmith, Ranger Naturalist**

Following the long, snowy, high Sierran winter, the Tioga Road is ordinarily not open to public travel until about the middle or latter part of June. The opening on May 24th during the current season was therefore one of only four May openings during nineteen consecutive years (1928-1947). Previous earliest openings during this interval have occurred on May 18, 1931; May 10, 1934; May 8, 1939. These early openings have been due largely to lighter than normal winter snowfalls, the precip-

itation for the 1946-1947 winter in the vicinity of Tioga Road to Tioga Pass being recorded as varying from 50 per cent of normal at 7,000 feet altitude, to 85 per cent or slightly less at 8,700 feet to 10,000 feet altitude (H. W. Robinson, Yosemite Nature Notes, April, 1947).

As a day's interlude from preparation for the coming naturalist season, the early opening of the road offered an unusual opportunity to observe the condition of the native life at higher altitudes in Yosemite during May. At

early morning on May 25th, the Big Oak Flat Road at 5,800 feet altitude below Crane Flat was bordered by dogwood in flower and especially by the mass of white bloom provided by the dense shrubbery of deer brush (**Ceanothus integerrimus**) and snow brush (**Ceanothus cordulatus**), and the blue of the littleleaf Ceanothus (**Ceanothus parvifolius**). The show made by these three Ceanothi all simultaneously in the full peak of flowering and in great profusion along three miles of roadway was a memorable spectacle.

Entering the dense red fir forest a short distance above Siesta Lake the first of the winter's snow was encountered, lying in drifts. The open, rocky, adjacent ground had long been bare of snow, and again we were impressed by the significance and value of forest in retarding the runoff, conserving the snows for the slow and prolonged dispersal of precious waters. The broad meadows of Tuolumne at 8,600 feet altitude, though bare of snow, were brown and showed not a suggestion of the verdure of summer. The willows bordering the brimful streams were with buds unburst. Even catkin time had not yet arrived. Cassiope at river's margin had minutely developed flower buds, giving only a hint of the delicate pendulous bells of early summer. The continued dormancy of vegetation was similarly observable to the summit at Tioga Pass. We had indeed jumped back in time to February, at least as the vegetation was concerned. Kneeling down and part-

ing the dead matted growth of the grasses and herbs one saw the green of short new shoots hidden beneath, a normal state at this time of year regardless of presence of any usual depth of snow cover, or of total absence thereof. In general plants of high altitudes have a rhythmic sequence of renewed growth activity which is scheduled to the norm of seasons over thousands of years. There is no abrupt awakening to a May, which like the present, is "out of calendar." Certain areas of Dana Meadows were, however, well packed with snow. These same areas are the ones in which certain flowers are most profuse during the summer, and there is probably a correlation between such localized deep snow drifts, slow melting, and abundance of flowers. On the other hand, in striking contrast was the very obvious response to the advanced season by the tree toads (**Hyla regilla**). The innumerable ponds of the Dana Meadows resounded with the "crack-it" chorus. A few marmots and belding ground squirrels were to be seen, as active as on any summer day. Overhead were foraging flocks of pine siskins, accompanied by Cassin purple finches with their enthusiastic song. From the forest nearby came the haunting melody of the Sierra hermit thrush. The active mammal and bird life seemed out of accord with the dormant vegetation until it was recalled that the meadows were far retarded in their development not only because of their fairly fixed seasonal adjustment, but also because of



Mammoth Mountain from Dana Meadows

Photo by Anderson

the cold air which settles into the low places they occupy. The heavy cold air is drained from the neighboring mountain slopes which as a consequence enjoy a more continuous warmer air and a more advanced season. There the sources of food supply for bird and mammal would, in general, be more abundant. Great drifts of snow lay on the side leeward to the prevailing westerly winds which sweep by Dana Meadows. Tioga Lake was clogged with drift-

ing ice floes, while the aspens on the adjacent warmer slopes were already a delicate green with tiny, half-developed leaves.

It was with reluctance that we returned from our trip knowing too well that not only are observations of the annual renewal of life activity in these high altitudes full of interest, but also that our knowledge of this part of Yosemite's natural history needs much closer study.

### NEW BIRD RECORD

About 4:30 the afternoon of April 12th, Mr. Walter J. Fitzpatrick asked me to come with him to confirm the observation of a new bird for the Park list. In the pool below Camp 16, three male and two female Baldpates

(*Mareca americana* (Gmelin) were swimming serenely about. We are very grateful to Mr. Fitzpatrick for bringing another new bird record to our attention. (H. C. P.)

**WHITE PINE BLISTER RUST CONTROL IN YOSEMITE NATIONAL PARK****By Emil Ernst, Park Forester**

Since the summer of 1933 some form of White Pine Blister Rust Control activity has been underway in Yosemite National Park. White Pine Blister Rust (*Cronartium ribicola*) is a serious exotic disease which will have a tremendous future influence upon the stability of the forest stands of the three white pine species of trees native to Yosemite National Park. These three white pines are (1) the sugar pine (*Pinus lambertiana* Douglas), (2) the western white pine (*Pinus monticola* Douglas), and (3) the whitebark pine (*Pinus albicaulis* Engelm.) There is no question at all about what shall happen to these white pine forest stands if no steps toward reducing or eliminating the effects of the disease are taken. No control work definitely means that eventually the extensive stands of sugar pine and the more or less scattered but yet considerable stands of western white pine and the whitebark pine shall be but a memory in the days to come.

The expectable losses from the inroads of this terrible tree disease, which came to this country from Europe, can be appreciably reduced and in many areas entirely eliminated through aggressive control measures. Control lies in the fact that the disease must go through a complicated life cycle in order to spread from one tree to another. A portion of the life history of the rust must be spent on plants of the genus *Ribes* which are commonly called goose-

berries and currants. Fortunately the spread of the disease from the *Ribes* bushes occurs over a radius usually not exceeding 1,000 feet. The disease can spread from the pines to the bushes over distances that may exceed 300 miles. On the tree itself the disease does not jump from one part to another but does spread from its focal point of infection until the portion upon which it alights is girdled and killed.

There is also now no question about whether or not the disease will spread until it is present throughout the white pine stands of California. It was introduced into western America at Vancouver, British Columbia, in 1910. It has since spread southward and eastward until in 1944 it was found on the Eldorado National Forest in California, which is about 160 air line miles from Yosemite National Park. Each fall scouting parties are looking for its presence all through areas where control operations have been in progress. The 1946 season's scouting results have not been compiled and studied completely so its latest extent is not yet known.

Yosemite National Park has tremendous values at stake because of the extensive stands of virgin sugar pine for 20,000 acres of which the government and interested private parties have contributed over \$3,500,000 in two large land and timber purchases in 1930 and 1939. And these 20,000 acres represent only a portion





*Sugar pines in Yosemite National Park. Note man on the left.  
Photo by Willard G. Van Name, Courtesy of Emergency Conservation Committee*

of the magnificent sugar pine forests of this park. It has been estimated that 146,000 acres of sugar pine, western white pine and whitebark pine in the park are in areas that could benefit from control activities. There are areas where the sparsity of the susceptible pine species would not warrant the expenditure of the funds necessary for their protection. On those areas it can be expected that the white pine species will have a tremendous struggle for survival if they do survive.

Control of the disease lies in the fact that it must have an alternation of hosts in order to complete its life cycle. These hosts are the white pine tree species and various species of the genus *Ribes*. Remove either one and the life cycle can be broken so that the disease cannot spread any farther. Economically and aesthetically the tree species are more desirable while the removal of the *Ribes* species is economically and physically practical. The *Ribes* plants are removed (eradicated) in many ways depending often upon location and the species being destroyed. Most of the *Ribes roezli* have been eradicated with hand tools such as the improved claw mattock which extracts the entire plant including roots from the ground much as a claw hammer extracts a nail. It has been necessary in other cases, because of the concentration of bushes and their size, to employ winches on tractors to drag out the bushes, to bulldoze the plants right out of the ground, and where plants have been inaccessible to

power machinery or growing in rocks to use explosives also. The park has not used chemicals for eradication for one reason or another except for the use of a small amount of diesel oil on plants growing in crevices where the use of hand tools was impossible. Lately the use of a chemical commonly known as 2,4D in experimental eradication is available for use on areas where spray equipment can be used. The Director, in his memorandum of December 27, 1946, has approved the use of this chemical in *Ribes* eradication operations in Region Four. This chemical can be applied in solutions as low as 720 parts in a million with complete killing of all of the *Ribes* bushes sprayed with the solution. A peculiar feature of this chemical is that it is not at all toxic to grasses and extremely toxic to *Ribes* bushes at low concentrations of solutions. It is harmless to all forms of animal life.

The Blister Rust Control program has been in progress in this park for 14 years. In that time 77,244 acres have been covered and 16,077,619 *Ribes* bushes have been destroyed. Not quite half of the 146,000 acres in the contemplated control areas have been covered so that a considerable amount of work remains to be done. There is considerable personal satisfaction in the fact that this White Pine Blister Rust Control work will preserve for posterity extensive areas of virgin sugar pine and western white pine forest stands which in the not too far distant future will be the only areas of their kind.





NATURE NOTELETS

Just what is happening to some of the young giant sequoia trees of the Mariposa Grove of Big Trees is causing some speculation. Late last fall a number of the trees appeared to have been partially stripped of their bark. At first glance one might think it was porcupines that had done the work. On closer examination, the inner cambium layer of the trees seemed to remain intact and only the outer portion of the bark was stripped away.

Since it is known that the Douglas squirrel or chickaree likes to line its nest with soft material, we wonder if the outer bark of these young sequoias could have been taken for that purpose. At any rate, there was enough material taken to line a good many squirrel nests. It is doubted that the trees suffered any great damage from the mysterious robbers. (R. H. A.)

The cyclic increase and decrease of various animal populations is a phenomenon well known to all zoologists. During the past twenty to twenty-five years the California gray

squirrel (*Sciurus griseus griseus*) in Yosemite Valley has demonstrated this to a remarkable degree. Virtually wiped out by an epidemic in the early twenties, this species was extremely rare for a number of years. An all day census of the Valley, taken in the summer of 1935, revealed but two individuals. At the same time the Sierra chickaree (*Sciurus douglassii albolimbatus*) was very numerous, apparently having moved down from the Canadian Life Zone above the rim to fill the vacancy left in the forest economy by the decrease of the gray squirrel. However, by the early forties, the grays had made their way back to such an extent that a considerable number were killed by motor cars traveling over the regularly used highways. The chickarees were then very much less abundant. This must have been the peak of the cycle, for now, while the California gray squirrel is common, we also find a goodly number of chickarees in the same forests. They may indicate a downward trend of the gray squirrel population, though not catastrophic in extent. (H. C. P.)



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Dan Anderson