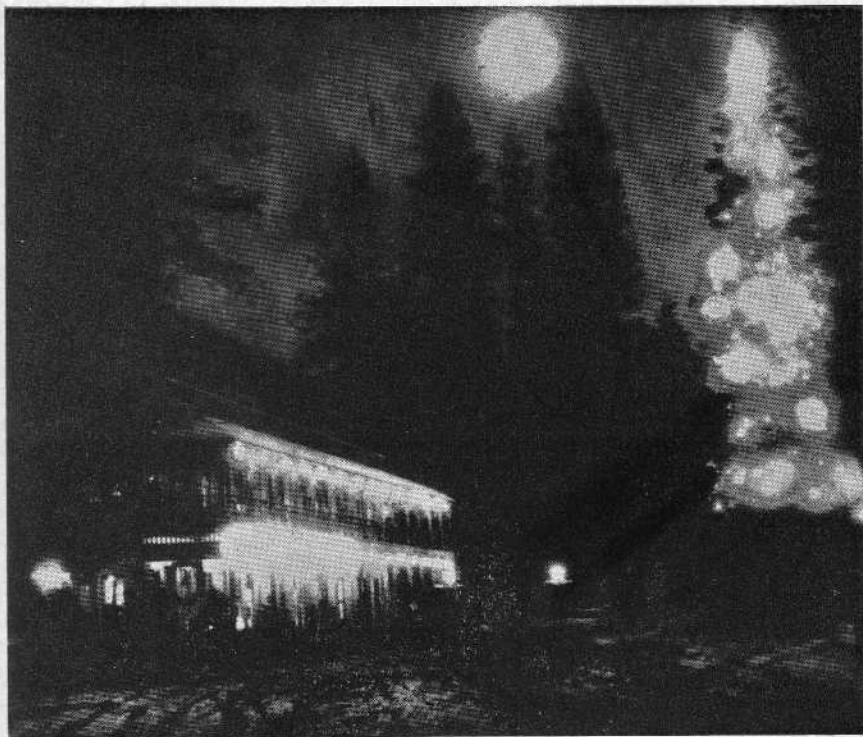


YOSEMITE NATURE NOTES

Vol. XXV

December, 1946

No. 12



The Old Village -- Christmas, 1927

**BOOKS AND MAPS FOR SALE
AT THE YOSEMITE MUSEUM**

All mail orders should be addressed to the Yosemite Natural History Association, Yosemite National Park, California. The California Sales Tax of two and a half per cent (2½%) and postage should be included with check or money order. Please do not send stamps.

GENERAL

Adams Illustrated Guide to Yosemite Valley —Ansel and Virginia	
Adams	\$ 1.00
Guide to the John Muir Trail and the High Sierra Region —Starr	2.00
Handbook of American Mountaineering —Henderson	2.75
Manual of Ski Mountaineering —Brower	2.00
Self Guiding Auto Tour of Yosemite Valley —Beatty and Harwell10
Sierran Cabin—From Skyscraper —Goethe	1.25
Son of the Wilderness (Life of John Muir)—Wolfe	3.50

ANIMAL LIFE

Bears of Yosemite National Park —Beatty25
Birds of the Pacific States —Hoffman	3.50
Birds of Yosemite National Park —Beatty and Harwell25
Field Guide to Western Birds —Peterson	2.75
Fishes of Yosemite National Park —Evans25
Fresh Water Fishing—A Fisherman's Manual —Shoemaker	3.00
Fur-bearing Mammals of California —Grinnell, Dixon and Linsdale (2 Vol.)	15.00
Meeting the Mammals —Cahalane	1.75
Reptiles and Amphibians of Yosemite National Park (Walker)25
Waters of the Golden Trout Country —McDermand	3.00
Wildlife Stamps of the National Parks (Miniature) Book of 26 stamps15
Wildlife Stamps of Yosemite National Park (Miniature) Book 32 Stamps10

(Continued on Inside Back Cover)

Yosemite Nature Notes

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

F. A. Kittredge, Superintendent

M. V. Walker, Associate Park Naturalist

Harry C. Parker, Assistant Park Naturalist

VOL. XXV

DECEMBER, 1946

NO. 12

CHRISTMAS. HOLY SPIRIT. PEACE

By June E. Alexander

The weary earth, still aged and wracked with woe,
The deep, continuous night, and human tears,
Unchanging as those stars that long ago
Shone out upon the terror of men's fears;
They still await that Spirit out of time
Upon this tense, expectant Christmas Day,
That Spirit given the world of sin and grime
By babe named Christ in humble bed of hay.
Oh Spirit of divine and holy mein,
Giving to men a harmony and hope
More eternal than the snow-clad evergreen!
Breathe gently on mankind and let his grope
And search for life and way of Jesus cease
Upon this Christmas, Holy Spirit, Peace!





CLOUD FORMS ARE INTERESTING

By Margery Kennedy, Museum Secretary

When you start up the last slope after a long and steady hike, something makes you pause to get enough strength to make the hill. While you are "catching your breath" you glance about you—flowers, the creek, that small movement that catches your eye, and then your eyes wander to the tree tops and to the sky itself. If you are very tired you look for a "soft" place to lie down where you can really appreciate the height of the magnificent trees and watch the birds glide from tree top to tree top.

As you lie there absorbing the beauty about you the stillness creeps into your thoughts and you become quiet though your senses are more alert. A white form leisurely glides into view—the first cloud you have actually taken time to observe although you have noticed many of them before, but now it is alone and you are resting so you "look" at it and see how it floats and swirls within its own complete form. You fix this cloud shape in your mind and your eye wanders over the sky looking for other white shapes.

Many more are coming in from the horizon's edge. Each is traveling its own rate and direction.

After moving around to make yourself comfortable your curiosity becomes more aroused and, with your arms under your head, it now becomes a game to watch these "sailors of the sky." Each has its own shape, its own distinctiveness, yet there is a similarity to all the others. As you watch your mind begins to try and remember what you once learned about them. What was the name of each cloud form? Did it not depend on the height of the cloud as well as the form it took? Did not the pilots fear a particular type of cloud form—the one with the anvil-shaped head that would bounce the plane out of control, take it to tremendous heights, then plummet it down at a terrific speed so that the materials would not stand the tremendous changes in strains? When you were out walking with others was not there always someone who noticed the clouds and asked what their names were, for they too were interested in the out-of-doors and were learning the names of the trees, birds, flowers, and animals.

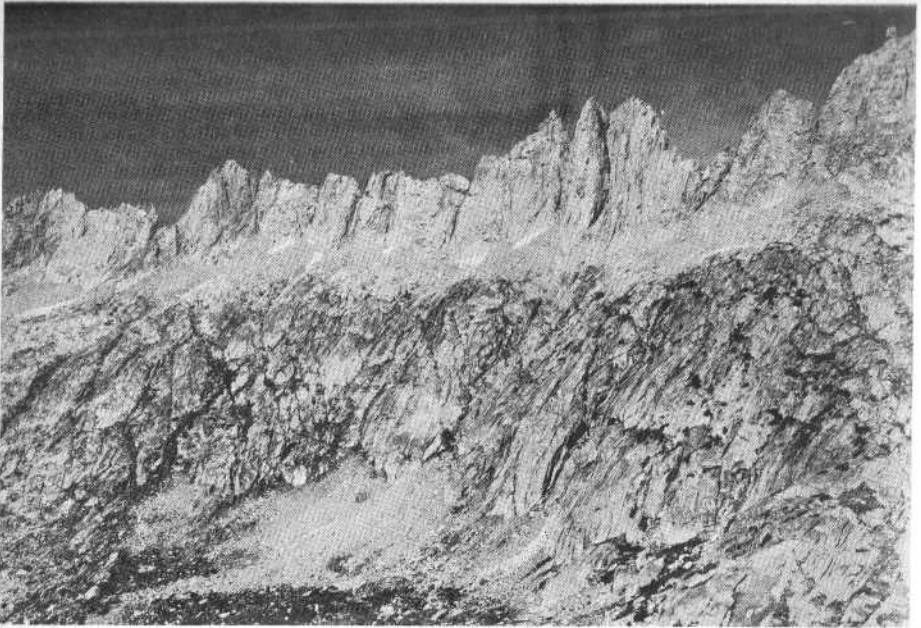
Your mind stops reminiscing and your eyes bring you back to reality. Is not that big fluffy cloud just over the horizon called "cumulus"? Do the words "stratus, cirrus, and nimbus" refer to cloud form or cloud height? The weariness of the body

cannot compete with the enthusiasm of the mind, so after the day's outing books are pulled from the shelves and an effort is made to answer the questions which have arisen during the day.

Like all other forms of natural science there has been a great deal of controversy in the classification of cloud forms, but after years of observance and study the U. S. Weather Bureau has adopted the International Cloud Committee's Grouping as their standard. This nomenclature classifies clouds according to their relative height and forms:—

1. Upper clouds:—cirrus, cirro-stratus
2. Intermediate clouds:—cirro-cumulus, alto stratus, alto cumulus
3. Lower clouds:—strato-cumulus, nimbus, fracto-nimbus
4. Clouds formed by diurnal ascending currents — cumulus, fracto-cumulus, cumulo-nimbus

You will notice that the adjectives applied to the particular forms of each cloud describe their origin or their altitude. The main cloud divisions also have their meanings for nimbus means storm clouds, stratus means layer, cumulus means pile, and cirrus means lock of hair. Since definitions come from the appearance, composition, height and manner of formation of the clouds themselves, perhaps it would be well to



examine each cloud type separately according to decrease in altitude.

Cirrus is generally the highest type of cloud with the appearance of filmy, delicate, swirling wisps of fibers. It is often called cat's whiskers or mares' tails. It usually occurs six to seven miles above sea level and consists of ice particles which form at that altitude, although it may occur at much lower levels. This type of cloud gives a general indication of good weather if it slowly disappears, but if it becomes more dense it is the forerunner of rain. **Cirro-stratus** is the next in height with an appearance of a formless white haze in sheets or layers giving the whole sky a milky

appearance. It causes the well known ring or halo around the sun or moon. It consists of ice crystals for only this type of formation refracts light in such a manner to cause a ring or halo to be formed.

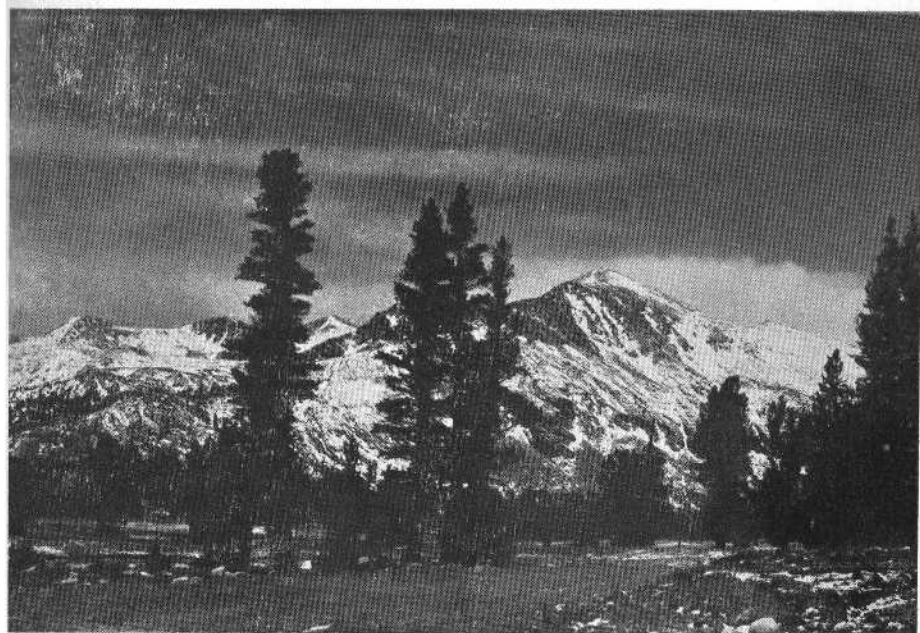
Cirro-cumulus, next down the scale, is a white, small ball-like ranged in somewhat consistent patchwork, lumpy and rather fibrous, patterns although so very thin that they cast practically no shadow. **Alto-stratus** is often a structureless type, or it may be fibrous yet so very thin that it causes no halos. It gives a grayish or blueish cast to the sky. **Alto-cumulus** is lower than the alto-stratus and is a small whitish or grayish ball-like form closely packed

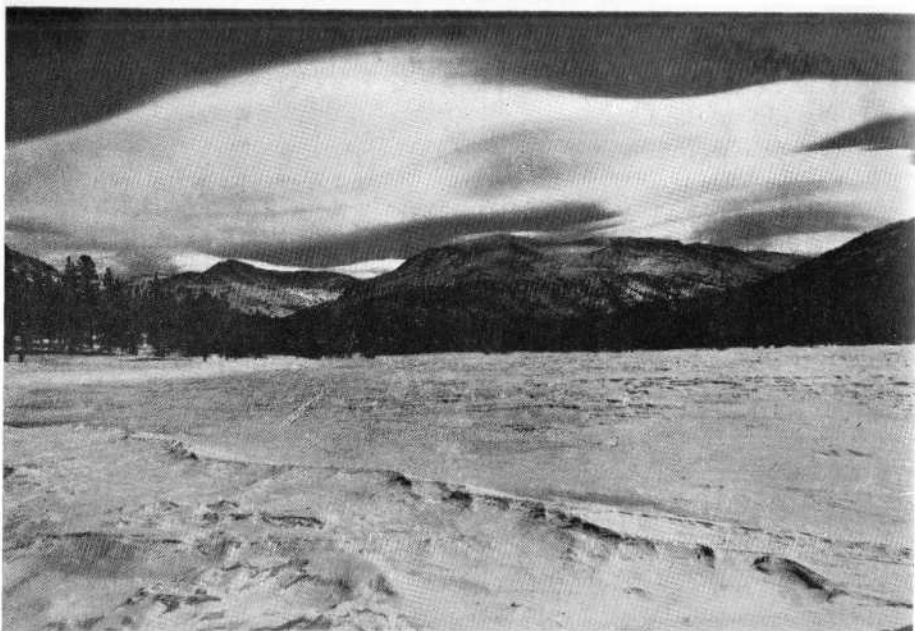
but isolated or nearly so. They march across the sky generally in two directions. The beautiful glimpses of different portions of the spectrum as the clouds refract the light show that the clouds are made up of water droplets—causing coronas—and not halos which ice particles produce.

Next in order is the **strato-cumulus** which is a sheet-like layer of clouds with large balls of whiter clouds within this sheet, flat at the base and rounded at the top. **Nimbus** is the cloud from which rain is falling and is a rather dark, dense looking cloud covering a great portion of the sky without definite form. Many times the topmost portion of the cloud is blown out in an unruly manner.

Fracto-nimbus looks like the nimbus cloud but is not as dense and moves below the main cloud.

Cumulus clouds, which are largely "daytime" clouds, have the appearance of great fluffy balls with flat bases. They look so very comfortable and inviting that you almost wish you could lie down on them and dream while floating through the sky. They have a lovely white rim with a "silver lining" but their centers are darker. They come over the horizon in a symmetrical pattern. **Fracto-cumulus** is a ragged cumulus (cotton ball) cloud. **Cumulo-nimbus** is the anvil shaped thunderhead that is a turbulent mass of dark heavy clouds accompanied by clouds from





which rain is falling. This is a rather solitary type of cloud covering a great area although there may be a series of them.

Here in Yosemite Valley we are fortunate because we often have an opportunity to see Half Dome's spectacular cloud formation known as the "banner" cloud. This cloud often forms in a clear atmosphere, but where the humidity is almost to the saturation point. As the air currents come in contact with the cold walls of the peak, or are affected by the decrease of pressure in the eddy region on the leeward side, condensation results and the cloud

forms. It seems to be attached at its base to the mountain, but is blown out into a long "banner," and has the form of the well known school pennant.

Cloud forms are interesting. They tell us much about the "ways of the weather." They intrigue us with their characteristic forms which we soon learn to recognize and interpret. Some clouds are warm, soft, and friendly. Other clouds are cold, forbidding, and frightening. But all in all, clouds always arouse our curiosity and interest and invite speculation as to their cause and effect.

Suggested References

Humphreys, W. J., *Ways of the Weather*. The Jaques Cattell Press, Lancaster, Penn.
Milham, Willis Isbister, *Meteorology*. The MacMillan Company, New York.



GETTING ACQUAINTED WITH A WHITE-FOOTED MOUSE

By F. Robert Kirschman, Museum Assistant

The Gambel white-footed mouse (*Peromyscus maniculatus gambelli-Baird*) is usually considered a nocturnal animal, however, I had the unexpected good fortune to find one out in the open and very active even by midafternoon on August 25, 1946. I chanced upon this specimen along the Mist Trail near the foot of Nevada Fall. It was foraging for food amidst a profusion of fallen Douglas fir cones and catkins. The mouse paid little heed to my presence, and by moving slowly and quietly, I was able to approach within a few feet of its foraging ground.

The blue-gray color of the upper body, head, and stripes along the top of the tail, seemed to indicate that the mouse was immature. This conclusion was further substantiated by the fact that the head appeared larger in proportion to the body than is the case with adult specimens. The tail seemed to be about the same length as the head and body

combined, whereas it is shorter in the adult animal. While I lacked the means for accurate measurements, the head and body appeared to be approximately two and one-half to two and three-quarters inches in length and the tail about the same. The length of head and body in adults is usually from three to three and three-quarters inches, and the tail from two to two and three-quarters inches.

Since the mouse was busily engaged in its search for food (probably Douglas fir seeds), it paid scant attention to me as I followed closely behind it. When it was eating, the mouse would balance on its hind legs and hold the food in its front paws squirrel fashion.

During the course of this observation, I had the occasion to place my hands upon a rock in order to peer over. The mouse sensed my presence and curiosity apparently caused it to climb up the rock to

one of my hands. After "sniffing" my little finger for a moment, it climbed upon the back of my hand and started poking its nose between two of my fingers. Although the mouse did not seem to mind as I raised it up on the back of my hand, it jumped to the ground when I attempted to grasp it with my other hand.

The mouse still refused to seek a refuge. Not wishing to take such a friendly and trusting little creature back to face the perils of Yosemite Valley with its mouse traps and speeding automobiles, I left it to forage unmolested, with the hope that the next person who may encounter my little friend will not betray its trust in mankind.

BOOKS AS GIFTS AT CHRISTMAS TIME

A large number of books are ordered each year through the Yosemite Natural History Association for use as Christmas Gifts. For the first time in several years we now have on hand a good stock of popular books, many of which have been out of print for some time. (See list "Books and Maps for Sale at the Yosemite Museum" on inside front and back cover of this issue.)

We again ask your cooperation in the handling of these special mail orders at Christmas time. It would be appreciated if we could receive your order well in advance of the holiday rush. We especially request that you include in your check or money order the 2½% state sales tax which we are required to collect on our book sales.

SPECIAL NUMBER IN JANUARY

The January 1947 number of Yosemite Nature Notes will be devoted entirely to the subject, "The Broad-leaved Trees of Yosemite National Park." This booklet, prepared by former Park Naturalist C. Frank Brockman, will contain approximately 40 pages and will be profusely illustrated.

YOSEMITE NATURE NOTES CELEBRATES TWENTY-FIFTH ANNIVERSARY

The December number of Yosemite Nature Notes completes the twenty-fifth volume of this unique publication. It also completes the twenty-second volume of the printed series, which began in January, 1925.





Digitized by
Yosemite Online Library

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

Dan Anderson