

Yosemite's natural beauty can be found in things big and small, from towering granite cliffs and giant sequoias to diminutive wildflowers. Varied conditions in four geographic areas—HIGH SIERRA, GRANITE CLIFFS, SEQUOIA GROVES, and VALLEY—make such diversity possible. Explore Yosemite's many facets, take in its many moods, and enjoy its views, sounds, and smells.

It is by far the grandest of all the special temples of Nature I was ever permitted to enter.

—JOHN MUIR

Half Dome (right)
Yosemite Valley
© TIM FORTNA



Olmsted Point
glacial erratic boulder
© FRANK BARNES



Lembert Dome
roche moutonnée
© JAMES HANSEN



Cathedral Peak
nunatak
© GEORGE G. HENRIKSEN

Life in the High Sierra adapts to the dramatic seasonal weather patterns. All summer the pika works furiously to cache food to eat throughout the winter. Marmots store fat, and then hibernate beneath the winter snow. Clark's nutcrackers bury seeds, assuring survival of the birds as well as the trees.

Yellow-billed marmot, pika (middle), and Clark's nutcracker
© GREGG/ALAMY, LEONARD LEE FOR GETTY IMAGES, GREGG



Hiker routes crossed
the High Sierra.
© AP

HIGH SIERRA

HIGH SIERRA Smooth granite domes, craggy peaks, and spacious meadows embody the character of the High Sierra. Hundreds of miles of hiking trails offer adventure, solitude, and inspiration for those wishing to explore this glacially carved landscape and experience ever-changing mountain ecosystems.

Glaciers sculpted this landscape, plucking, scraping, and polishing as they moved down canyons. Their power shaped Lembert Dome (far left), a roche moutonnée—French for "sheep rock." Cathedral Peak's (far left) knobby top, known as a nunatak, stood above the glaciers, escaping their force. As the climate

warmed, glaciers melted, leaving huge "erratic" boulders stranded and sometimes precariously perched.

As the climate continues to change, life at high elevations is notably affected. Intolerant of heat, pikas (far left) are adapted to the high country's cool temperatures. They live in rock piles where they find shelter from predators and the heat of the summer sun. As the climate rapidly warms, the pika's habitat is shifting upward in elevation. Where will the pikas go when they run out of mountain?

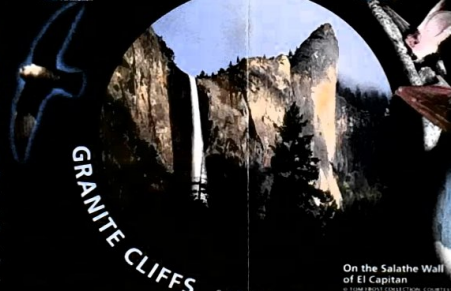
Alpine columbine (hybrid)
© ADAM R. PAUL

GRANITE CLIFFS The massive cliffs of Yosemite and Hetch Hetchy valleys challenge the body and mind, especially the inquisitive nature of human beings. When an 1868 Yosemite guidebook declared, "the summit of Half Dome will never be trodden by human foot," it was taken as a challenge. George Anderson reached the top in 1875. Countless others followed. One by one, adventurous men and women made other first ascents on sheer granite walls in Yosemite, changing the sport of climbing forever. The challenge of these cliffs continues to beckon climbers from around the world.

The very existence of great cliffs like Half Dome and El Capitan has inspired questions about how they came to be. American Indians tell of a woman and her husband who argued and fought. The displeased spirits changed them into stone, Half Dome and North Dome, forever to face each other across the Valley. How these cliffs were formed has challenged geologists for over 100 years. They think the granite of Yosemite's walls solidified over five miles underground. As the overlying rock eroded away, the granites rose to their current exposed level. Nature's dynamic forces continue sculpting this exposed rock.

Black swift
© BOB SCHNEIDER

GRANITE CLIFFS



Spotted bat
© BOB SCHNEIDER



Light scar reveals a fresh rockfall

Dark streaks are caused by lichens

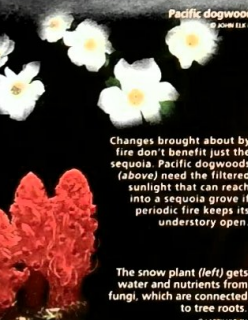
Peregrine falcon
© K.C. HUB

Rockfall continually changes Yosemite's great cliffs at a rate difficult to chart in the comparative brevity of human lifetimes. Water, ice plants, and gravity have worked on these granite walls for millions of years and continue to shape them today.

On the Salathe Wall of El Capitan
© JAMES HANSEN FOR GETTY IMAGES, JAMES HANSEN



Chickaree
© ROBERTA SILVY



Pacific dogwood
© JAMES HANSEN

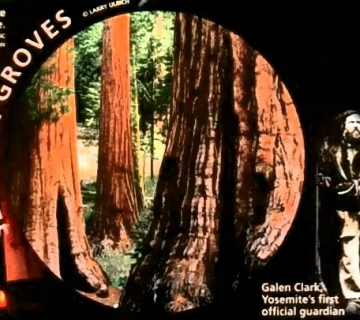
Changes brought about by fire don't benefit just the sequoia. Pacific dogwoods (above) need the filtered sunlight that can reach into a sequoia grove if periodic fire keeps its understory open.

The snow plant (left) gets water and nutrients from fungi, which are connected to tree roots.



Giant sequoias need fire so they can reproduce
RAYMOND GERMAN, NATIONAL GEOGRAPHIC IMAGE COLLECTION

SEQUOIA GROVES



Galen Clark, Yosemite's first official guardian
© CALLETON L. WATERS

SEQUOIA GROVES Giant sequoias dwarf even the largest pine and fir trees that live among them. They are descendants of an ancient line of trees and can live for over two thousand years. Their trunks can reach over 25 feet thick! As symbols of longevity and strength, the giant sequoias played a major role in the creation of what is now Yosemite National Park. Throughout the National Park System, thousands of rangers wear uniform belts and hatbands embossed with images of the cones and foliage of these significant trees.

President Lincoln signed the bill that set aside the Mariposa Grove, along with scenic Yosemite Valley, in 1864. In the years following this action, a fire started in the grove, and we began a 100-year history of protecting these beloved trees from fire. While our intentions were good, we were contributing to the loss of what we cared about so much. Through research and experimentation we discovered that fire actually promotes reproduction of these giant trees. It clears away the competing firs and cedars and exposes bare mineral soil for the tiny seeds to take root.

VALLEY "Everything is flowing," John Muir has written, "going somewhere, animals and so-called lifeless rocks as well as water." Most of the year, the Merced River flows peacefully through Yosemite Valley. Shrubs and deciduous trees enrich the riverbanks with green ribbons of life. Moist meadows give way to black oak trees that provide nutritious acorns to deer, bears, and woodpeckers, as they did for early Indian people. A flooding Merced, however, seems to shout "change" and reconfigures the handiwork of both nature and humans.

explosive makeover of a flood or 100-ton rockfall, nature undergoes constant transformation here. Water has played an important role in the geologic processes responsible for the stunning appearance of this "incomparable valley."

Yosemite Valley, with the Mariposa Grove, inspired the national park idea. The cliffs, waterfalls, wildlife, and beauty of this place continue to inspire people around the world.

"Yosemite Valley, to me, is always a sunrise, a glitter of green and golden wonder in a vast edifice of stone and space."
Ansel Adams, photographer
© ANSEL ADAMS

Spend time in Yosemite Valley and you will experience change. Whether it's the subtle daily changes in the flow of rivers and waterfalls, or the

VALLEY



Black bear
© BENJAMIN S. MILLER, COVERLOVE PHOTOGRAPHY

Lupine
© AP

Acorn woodpecker
© G. J. HUBBARD

Black oak acorn
© BOB SCHNEIDER

Mule deer
© LINDA G. HENRIKSEN

When you see the relatively lazy summer Merced River, it can be difficult to imagine how the same river, even in flood stage, could bring such dramatic change throughout the Valley—rearranging boulders, roads, and campgrounds.