



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?

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 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.

Light scar reveals a fresh rockfall Spotted bat Black swift Dark streaks are GRANII Rockfall continually change Yosemite's great cliffs at a rate difficult to chart in the comparative brevity of huma lifetimes. Water, ice, plants, and gravity have worked on these granite walls for millions of years and continue to shape On the Salathe Wal of El Capitan SEQUOIA GROLL

official guardian



VALLEY "Everything is flowing,"

flow of rivers and waterfalls, or the

John Muir has written, "going

the world.

explosive makeover of a flood or 100-ton rockfall, nature undergoes constant transformation here.

> always a sunrise, a glitter of green and golden wonder in a vast edifice of stone and space." Ansel Adams, photographer

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.

campgrounds.

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.

somewhere, animals and so-called lifeless rocks as well as water." Water has played an important role Most of the year, the Merced River in the geologic processes responflows peacefully through Yosemite sible for the stunning appearance Valley. Shrubs and deciduous trees of this "incomparable valley." enrich the riverbanks with green ribbons of life. Moist meadows give Yosemite Valley, with the Mariposa Grove, inspired the national park way to black oak trees that provide idea. The cliffs, waterfalls, wildlife, nutritious acorns to deer, bears, and and beauty of this place continue to woodpeckers, as they did for early inspire people around the world. Indian people. A flooding Merced, however, seems to shout "change" "Yosemite Valley, to me, is and reconfigures the handiwork of When you see the relatively both nature and humans. lazy summer Merced River, it can be difficult to imagine how the same river, even in Spend time in Yosemite Valley and flood stage, could bring such you will experience change. Whether dramatic change throughout the Valley—rearranging boulders, roads, and it's the subtle daily changes in the

Giant sequoias need fire

so they can reproduce



