



Flooded salt pan with Black Mountains
© RANDI HIRSCHMANN

Land of Great Extremes

Great extremes haunt this hottest, driest, lowest national park. Extremes in temperature and elevation create scenic vistas and ecological niches that host startling biological diversity. This desert supports nearly 1,000 native plant species and harbors fish, snails, and other aquatic animals found nowhere else. To the uninitiated, Death Valley National Park appears to be a vast, empty wasteland, but to the aficionado it is a place of wonder and endless stories. The colorful and rugged terrain shouts tales of cataclysmic forces that thrust rock layers upward and of opposing erosional forces battling to tear them down. Desert winds whisper romances of the past—of the '49ers lured by the glitter of gold and of Chinese laborers scraping borax-rich crystals from the valley floor. They spin dustdevil



Desert five-spot blooms in spring after rare winter rains.
© JIM STEINBERG

yarns of partnership between a teller of tall tales and his castle-builders. And, throughout time and into the future, the Timbisha Shoshone people live sustained by their “valley of life.”

To protect its extraordinary natural and cultural landscape, in 1994 Congress changed Death Valley from a national monument to a national park, enlarged the park to its present size, and designated most of it as wilderness. With your support, the National Park Service and Timbisha Shoshone people will preserve this area and its lore for present and future generations. In this land of stories, meaningful experiences await those who explore.

A Place of People

The raw desert landscape shapes Death Valley's human story. Like the mesquite tree, some of its people have deep roots, drawing sustenance from hidden sources. Others blow in on the hot winds of get-rich-quick schemes, then out again on scorched dreams, never anchoring themselves to the land. These stories capture the essence of the land.

10,000 years ago

The Ice Age ends. Early people live by lakes, marshes, and streams. As the climate dries, changes in lifestyle are necessary to survive. Small, mobile family groups travel between their summer and winter camps. The Timbisha Shoshone trace their ancestry to these people.

Pictograph
© JOHN DITTEL



1492–1849

With intimate knowledge of Tümpisa (Death Valley), Häutä (Panamint Valley), and the surrounding desert, the Timbisha Shoshone sustain their way of life. People of other cultures arrive and expand across North America.

1849

California Gold Rush lures shortcut-seeking wagon parties through here. Only one wagon makes it out. One '49er dies in the valley. In their account a member of the party turned and said “Goodbye Death Valley.” The name stuck.

1870s and 1880s

Mining era begins in 1873 with a silver rush. Panamint City's population soars to 5,000. By 1877 the deposits play out, and it becomes a ghost town. Chinese laborers gather borax salts, and 20-mule teams haul filled wagons to the railheads. The pattern of boom-and-bust mining continues.

1904

Gold—found just east of what is now the park—sparks the last great American gold rush. Gold draws 10,000 people, three railroads, and a masonry, three-story bank to the mining district of Rhyolite. In 1907 a financial panic cripples the boom that ends by 1912.

1920s

Albert and Bessie Johnson, friends of Walter Scott—the infamous “Death Valley Scotty”—begin building their Death Valley Ranch, now called Scotty's Castle. Tourism begins in Death Valley as the Furnace Creek Inn and the resort at Stovepipe Wells are built.



Scotty's Castle
© JEFF SINASS

1933

President Herbert Hoover establishes Death Valley National Monument, and the Civilian Conservation Corps (CCC) begins improving roads and facilities. Later, Presidents Franklin Roosevelt and Harry Truman expand the monument by presidential proclamations.

1976

As new mining techniques and open pit mines lead to public outcry, Congress passes the Mining in Parks Act, which restricts and regulates mining in Death Valley for the first time. The Monument is closed to new mining claims, and previously established claims and mines are closely monitored.

1994

President Bill Clinton signs the California Desert Protection Act, which enlarges and redesignates the national monument as Death Valley National Park. The act also establishes 95 percent of the park's 3.4 million acres as part of the National Wilderness Preservation System.

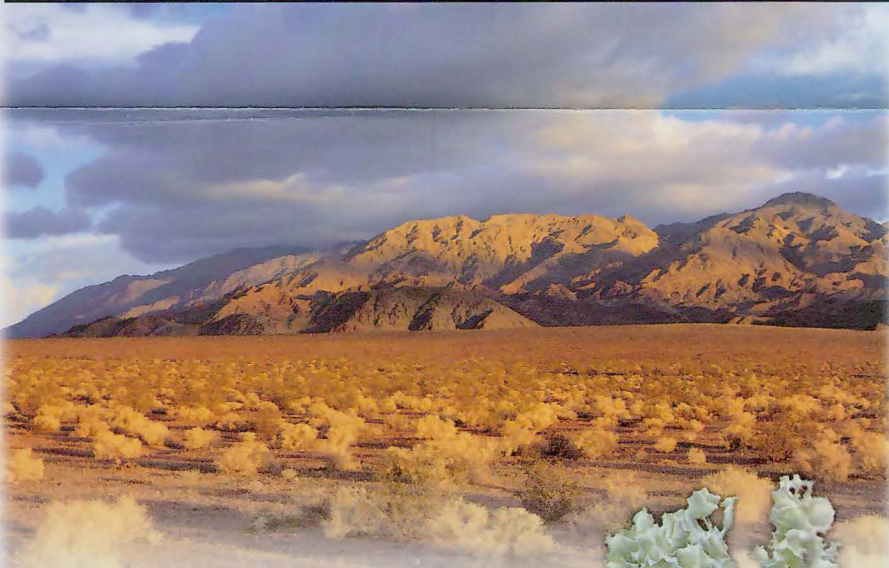
2000

Timbisha Shoshone Homeland Act allots the tribe acreage within their ancestral homeland to live on in perpetuity (see map on back). The tribe and the National Park Service, working as partners, jointly manage zones within the park boundary.

Desert Adaptations: To Survive and Thrive

Alluvial Fans

© FRED HIRSCHMANN



Desert Holly

What could deter plant growth more than Death Valley's minimal moisture, intense sunlight, drying winds, and salt from nearby salt flats? Desert holly (right) typifies how plants adapt to cope with desert realities. Its silvery-colored leaves reflect sunlight and are turned on edge to reduce exposure. Dormant in the extremes of summer, the plant grows and flowers in winter, relying on wind to pollinate it. Wind is abundant in the desert, but insect pollinators are less reliable, appearing when rare rainstorms cause spring wildflowers to sprout and bloom.



Dunes

© TOM BEAN



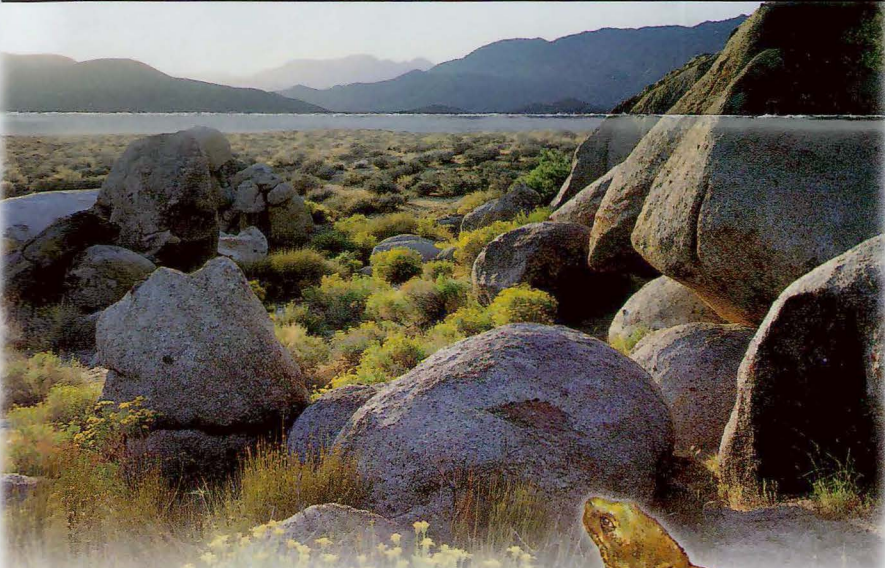
Kangaroo Rat

Death Valley lies in a rain shadow (see bottom diagram) and averages less than two inches of precipitation per year, yet moisture evaporates here at rates up to 150 inches per year! The kangaroo rat (right) can go without drinking for months and embodies many other adaptations for survival in the arid Mojave Desert. It metabolizes water from seeds it eats and conserves moisture by concentrating urine. The kangaroo rat's nasal passages can reabsorb water vapor from its breath. Like many desert dwellers this rodent is active at night (see its big eyes), avoiding daytime heat in its underground den.



Rocky Outcroppings

© FRED HIRSCHMANN



Chuckwalla

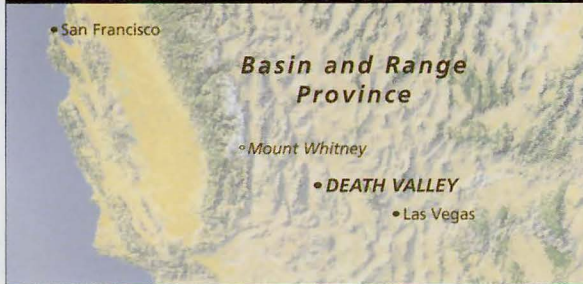
Survival strategies of the rock-dwelling chuckwalla (right), the park's largest lizard, involve using its body as a larder, a canteen, and a wedge. This vegetarian gorges when plants flourish after rains, reserving body fat for leaner times. Fluid from food is also stored internally, enough to allow it to survive without ever drinking water. The chuckwalla escapes predators by crawling into a rocky crevice where, by inflating its lungs up to three times their normal size, it locks into its retreat.



DESERT HOLLY, KANGAROO RAT, CHUCKWALLA
ILLUSTRATIONS NPS / ROBERT HYNES

Landscape Contrasts Create More Niches for Life

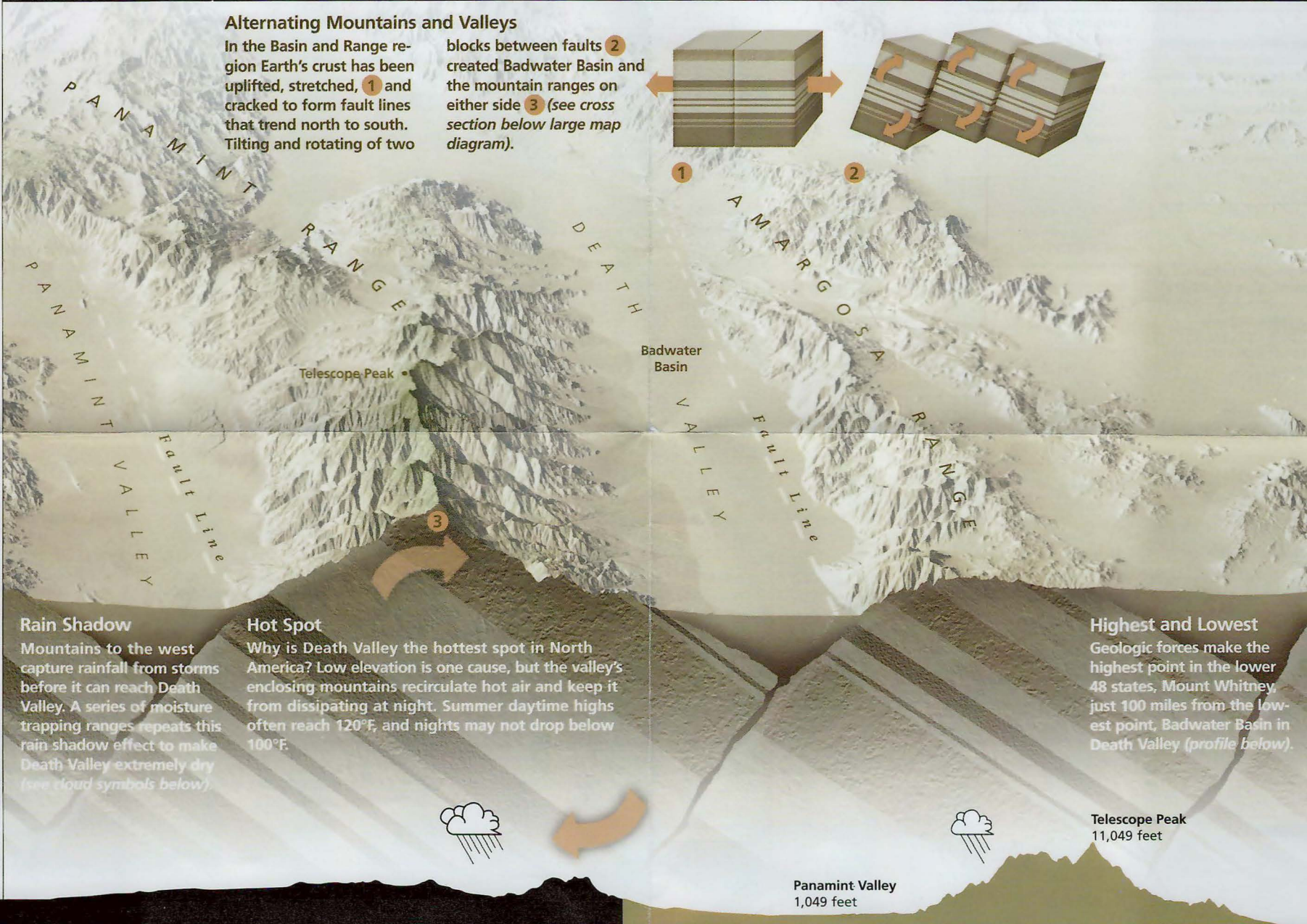
Faulting, Rain Shadows, Heat, and Life



Geology, climate, and biology intertwine at Death Valley. Active earthquake fault lines riddle the park. Like a giant seesaw, the Panamint Range (map at right) is one side of a tipping fault block that rises as the other side, Badwater Basin, falls. Erosion can not keep up with such active geology; the basin continues to drop below sea level despite millions of years of water-borne salt, silt, and gravel washing into it. Mountain ranges alternating with valley basins define the Basin and Range geologic province (see map above and large map diagram at right).

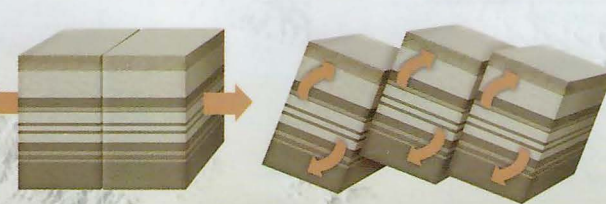
Mountains help generate Death Valley's extreme dryness by forcing most of the moisture out of eastward-moving clouds before they reach the valley. Basking under sunny skies, the deep basins trap heat to generate record summer temperatures. The wide range of elevations—from mountain summits to salt flats—creates the many habitats that support the surprising variety of plant and animal species in this Mojave Desert park. Higher elevations are wetter and cooler than valley floors. Canyons provide shelter from sunlight and drain water from the mountains to lower elevations, creating moister microclimates. Isolated habitats such as dunes and springs allow endemic species—ones found nowhere else in the world—to develop. The nature of the landscape helps determine the climate, and, together, they give rise to the diversity of life.

Today's Landscape



Alternating Mountains and Valleys

In the Basin and Range region Earth's crust has been uplifted, stretched, and cracked to form fault lines that trend north to south. Tilting and rotating of two blocks between faults created Badwater Basin and the mountain ranges on either side (see cross section below large map diagram).



Rain Shadow
Mountains to the west capture rainfall from storms before it can reach Death Valley. A series of moisture trapping ranges repeats this rain shadow effect to make Death Valley extremely dry (see cloud symbols below).

Hot Spot
Why is Death Valley the hottest spot in North America? Low elevation is one cause, but the valley's enclosing mountains recirculate hot air and keep it from dissipating at night. Summer daytime highs often reach 120°F, and nights may not drop below 100°F.

Highest and Lowest
Geologic forces make the highest point in the lower 48 states, Mount Whitney, just 100 miles from the lowest point, Badwater Basin in Death Valley (profile below).

Telescope Peak
11,049 feet

Panamint Valley
1,049 feet

Amargosa Range
8,738 feet

Death Valley

Badwater Basin -282 feet
Lowest point in North America

Cross-section profile represents 135 miles.

Profile of area shown in large block diagram above.

When It Was Wet



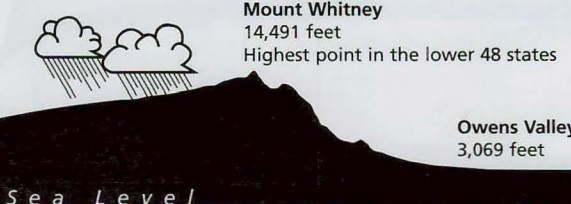
Tiny pupfish (above, actual size) are remnants of—and living clues to—Death Valley's once wetter past. For hundreds of thousands of years ending 10,000 years ago, Death Valley contained large lakes (diagram above) fed by abundant rainfall and meltwater from receding ice age glaciers in the Sierra Nevada. Climate change gradually dried up the valley lakes and forced most life—whether pupfish or human—to congregate near permanent water sources or to adapt to dry conditions. Since then desert pupfish have survived, living in isolated springs as warm as 90°F and in streams whose water can be five times as salty as ocean water. Rarest of them all, the Devils Hole pupfish is on the endangered species list. Further decreases in available water threaten its future. Death Valley offers us an opportunity to understand how vital fresh water is to life on our planet, which is a closed water system.

Death Valley National Park is one of more than 380 parks in the National Park System. The National Park Service cares for these special places saved by the American people so that all may experience our heritage. Please help us guarantee that these places will always be here for you and others to enjoy.

Death Valley National Park
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DIAGRAMS NPS



Sea Level

Death Valley National Park

