



Flooded salt pan with Black Mountains
© RONDI 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



Desert five-spot blooms in spring after rare winter rains.
© IRA STERNBERG

spin dustdevil 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. The stories at right capture the essence of this 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.

4,000 years ago

After a general drying trend, wetter conditions prevail in the region. Residents gather valley mesquite beans and mountain pinyon nuts. They trade obsidian from nearby quarries to coastal peoples for abalone and olivella shell beads.

Pictograph
© ROBERT LITTE

1492–1849

Timbisha Shoshone people sustain their way of life with their intimate knowledge of Tümpisa (Death Valley), Haütta (Panamint Valley), and the surrounding desert. People from 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—a silver rush. Panamint City population soars to 5,000. By 1877 deposits play out, and it becomes a ghost town. Chinese laborers gather borax salts, and 20-mule teams haul the filled wagons to railheads. A 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. The 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, which 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
© RITA LANDAU

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 designates 91 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

Death Valley’s low moisture, intense sunlight, drying wind, and salt from nearby salt flats limit plant growth. Desert holly (right) typifies plants adapting to deserts. Its silver-colored leaves reflect sunlight and turn on edge to reduce exposure. Dormant in hot summers, it grows and flowers in winter, pollinated not by insects but by wind. Insects appear when rare rains make spring wildflowers sprout and bloom.



Dunes

© TOM BEAR



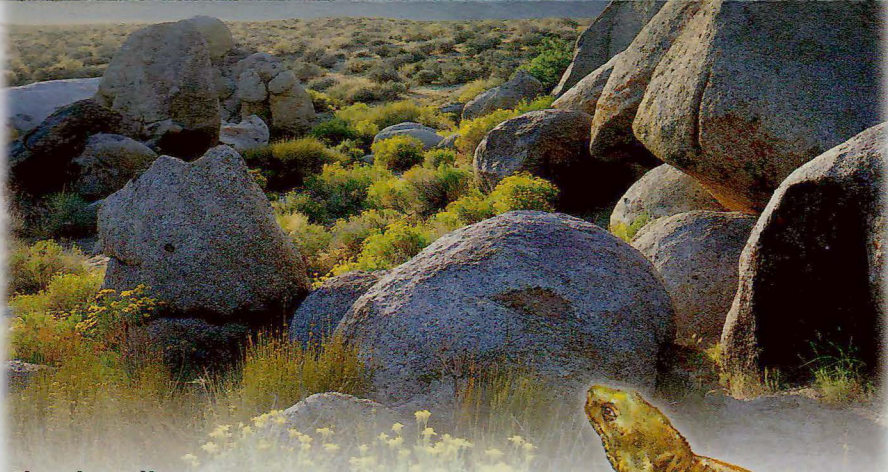
Kangaroo Rat

Death Valley lies in a rain shadow (bottom diagram). It 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 to survive dryness. It metabolizes water from seeds it eats and concentrates its urine. Its nasal passages can reabsorb water vapor from its breath. Like many desert dwellers this rodent is active at night (note its big eyes), avoiding daytime heat in its underground den.



Rocky Outcroppings

© FRED HIRSCHMANN



Chuckwalla

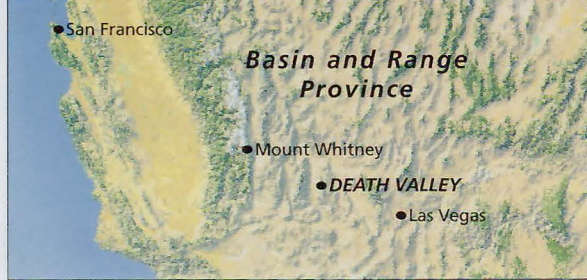
For survival the rock-dwelling chuckwalla (right), the park’s largest lizard, uses its body as a larder, canteen, and wedge. This vegetarian gorges when plants flourish after rains, reserving body fat for leaner times. It stores enough fluid from food internally to survive without ever drinking water. To escape predators the chuckwalla crawls into a rocky crevice, inflates its lungs up to three times their normal size, and thereby locks itself into its shelter.



DESERT HOLLY, KANGAROO RAT, CHUCKWALLA ILLUSTRATIONS BY ROBERT LITTE

Landscape Contrasts Create More Niches for Life

Faulting, Rain Shadows, Heat, and Life

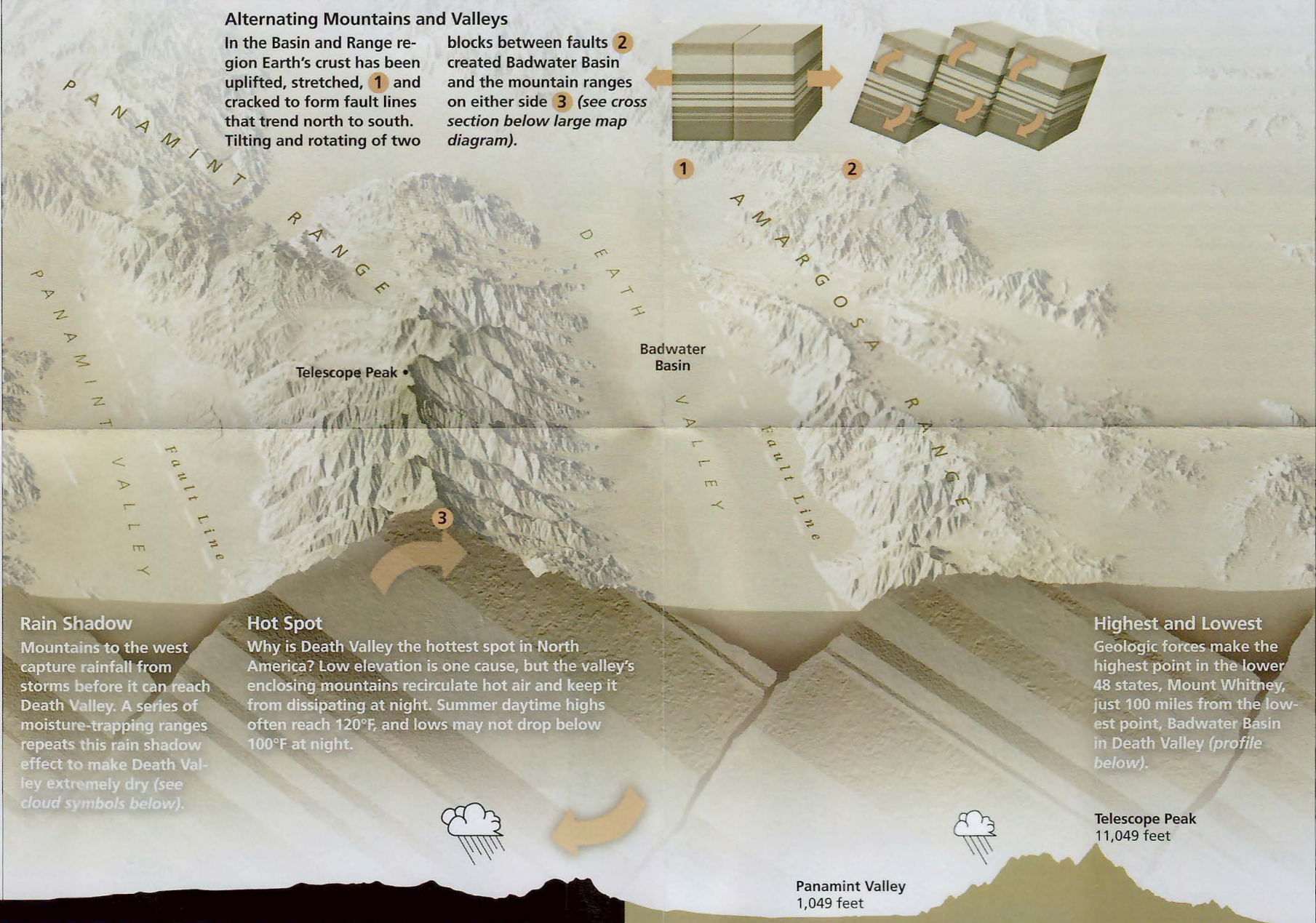


Geology, climate, and biology mix at Death Valley. Active earthquake fault lines riddle the park. Like a giant seesaw the Panamint Range (map at right) is one side of a tipping fault block that rises as the other side, Badwater Basin, falls. And erosion cannot keep pace with such active geology: the basin continues to drop below sea level despite millions of years of water-borne salt, silt, and gravels 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 make Death Valley extremely dry by forcing most moisture out of eastward-moving clouds before they reach the valley. Under sunny skies, the deep basins trap heat to generate record summer temperatures. Wide-ranging elevations—mountain summits to salt flats—create many habitats to support the surprising variety of plant and animal species in this Mojave Desert national park.

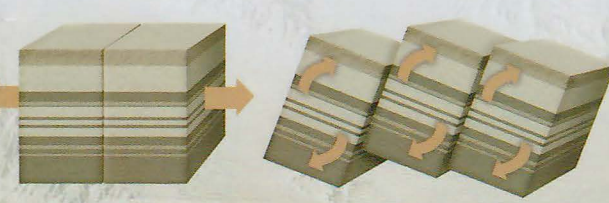
Higher elevations are wetter and cooler than valley floors. Canyons give shelter from sunlight and drain water from mountains to the lower elevations, creating moister microclimates. Isolated habitats like dunes and springs allow endemic species—ones found nowhere else in the world—to develop. The landscape helps determine 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, 1 and cracked to form fault lines that trend north to south. Tilting and rotating of two blocks between faults 2 created Badwater Basin and the mountain ranges on either side 3 (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 lows may not drop below 100°F at night.

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

Mount Whitney
14,491 feet
Highest point in the lower 48 states

Owens Valley
3,069 feet

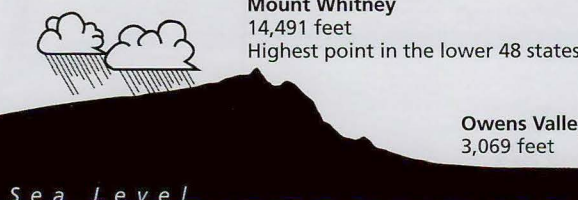
Amargosa Range
8,738 feet

Death Valley

Badwater Basin -282 feet
Lowest point in North America

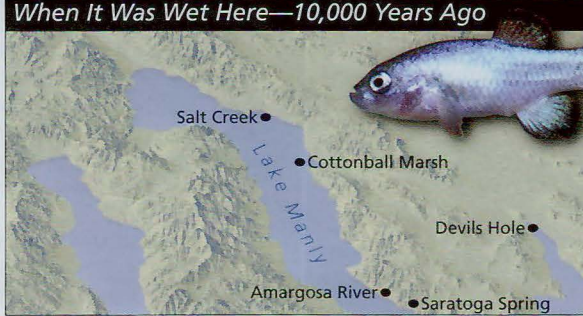
Cross-section profile represents 135 miles.

Profile of area shown in large block diagram above.



Sea Level

Pupfish
NPS



Valleys here were once lakes: Lake Manly (above) filled today’s Death Valley. Tiny pupfish (above, actual size) are remnants of—and living clues to—the wetter past here. For hundreds of thousands of years ending 10,000 years ago, today’s national park held large lakes fed by abundant rainfall and meltwater from receding ice age glaciers in the Sierra Nevada. As climate changed, valley lakes gradually dried up, forcing most life—pupfish or human—to congregate near the permanent water sources or to adapt to extremely dry conditions.

Since then desert pupfish have survived in isolated springs as warm as 90°F and in streams up to five times as salty as ocean water. Rarest of all, the Devils Hole pupfish is on the endangered species list. Decreasing available water threatens its future. Death Valley helps us appreciate how vital fresh water is to life on our planet, which is a closed water system. Please help us guarantee that these places will always be here for you and others to enjoy.

Death Valley is one of over 390 parks in the National Park System. To learn more about parks and National Park Service programs in America’s communities, visit www.nps.gov.

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Exploring Death Valley

