

# FAA/NPS Air Tour Management Program: Death Valley National Park

## OVERVIEW of PARK RESOURCES

Death Valley National Park (DEVA), the largest national park in the lower 48 states, includes 5,282 square miles of deep valleys and narrow mountain ranges in the Mojave Desert of California and Nevada. The park is best known for its forbiddingly hot, dry climate and for its extreme topography, which includes the lowest elevation in North America (282 feet below sea level). The park was converted from a national monument to a national park in 1994, at which time its size was increased by over 50%. In 2000, a portion of the park became the Timbisha Shoshone reservation (Figure 1).

DEVA can be reached from Las Vegas by car in approximately 2 hours and from Los Angeles in approximately 4 hours. Private planes can fly into the airport at Furnace Creek or the airstrip at Stovepipe Wells. It is visited by over one million people each year. Bus tours make August the park's busiest month.

**Natural Resources: Geology.** Visitors are primarily drawn to Death Valley for its spectacular and unusual landscapes, caused by a combination of geologic events and the fact that rain rarely reaches the area. Key natural features include:



- Enormous salt flats, left behind when huge glacial-era lakes evaporated
- Sand dunes over 700 feet high
- Ubehebe Crater, caused by a natural steam explosion
- The mysterious Racetrack, where isolated cobblestones creep unaided across a dry lakebed
- Darwin Falls, a rare waterfall in the desert
- Famous vistas, including Dante's View, Father Crowley Vista, Zabriskie Point, Artist's Drive, and Aguerberry Point

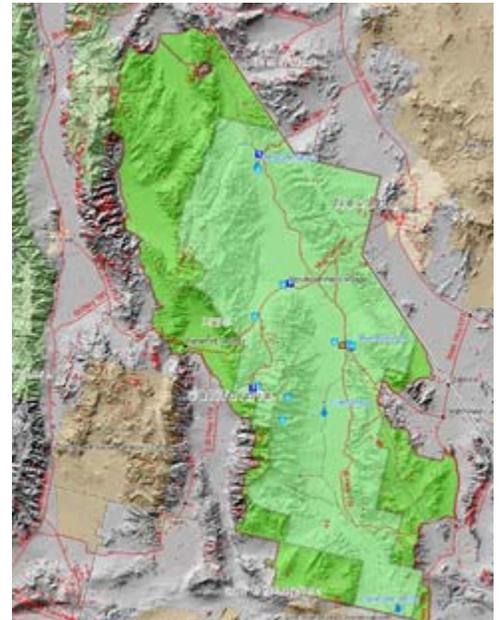
Many of these features resulted from the region's geologically recent uplift and stretching, caused by heat deep under the continental crust. Together these motions have created a series of north-south trending valleys separated by high, narrow mountain ranges. At the end of the glacial era, meltwater accumulated minerals in these valleys; when the lakes dried up, the minerals were left behind as huge evaporite beds.

**Natural Resources: Vegetation and Wildlife.** Plant communities in the park are diverse, mixing influences of surrounding desert areas with arctic/alpine biota at high elevations. The major vegetation types are scrub, desert woodland, and coniferous forest. The park contains 114 special-status plant species, including two federally endangered plants.

The park supports a wide range of wildlife species, but population densities are limited due to the need for water, cover, and food sources. Large browsing animals, such as bighorn sheep, deer, and elk, live in upper elevations while lower, sparsely vegetated elevations support reptiles, coyotes, and small mammals. Over-grazing by feral burros is an ongoing challenge.



The park is home to 57 special status animal species, including the federally endangered pupfish, least Bell's vireo, and Southwestern willow flycatcher, and the federally threatened desert tortoise.



**Figure 1.** Map of the park showing National Monument land (pale green) and expanded National Park land (dark green)

**Cultural Resources.** Human history in the Death Valley area began about 7,000 BCE when hunter-gatherers first arrived. At that time the climate was milder and large game was plentiful. New groups arrived and displaced these people while the climate grew hotter and drier. The occupants during the first millennium CE left evidence of skilled handicrafts, including petroglyphs.

For the last thousand years or more, the Timbisha Shoshone people have lived in and around Death Valley, migrating with the seasons, hunting game and gathering mesquite beans and pinyon pine nuts. The Timbisha, whose name means “red rock face paint,” use red paint in ceremonies that celebrate the earth, from which the tribe gets its strength. The Timbisha Shoshone way of life was changed forever when the latest group of people arrived in 1849: EuroAmericans, lost on their way to the gold fields. For 150 years, the Timbisha endured in the area, displaced but not gone. In the 1930s, a small Timbisha Shoshone village was built south of Furnace Creek. In December 2000, the Timbisha Shoshone reservation was established within the park, restoring tribal control of 7,700 acres of traditional lands.



Memoirs of the ‘49ers brought outside attention to Death Valley, and by the 1880s evaporite ores were being mined and processed on a large scale. Although attempts to mine precious metals largely failed, the valley became the world’s primary source of borax. Mining brought short-lived boom towns, scams, and wild legends to the area and left a series of hazardous mine shafts dotting the landscape. The 1920s saw tourists building private homes or coming

to the Pacific Borax Company’s new Furnace Creek resort to enjoy curative properties of natural springs. The largest private ranch is now known as Scotty’s Castle and has become a major attraction in the park.

This history has left an assemblage of archaeological and historic resources scattered through the park, less than five percent of which has been systematically surveyed. Remnants of the mining era (which ended in 2005) are relatively well known, but it is presumed that the majority of archaeological data remains to be discovered. The park currently has seven sites listed on the National Register of Historic Properties, mostly related to mining.

**Visitor Resources.** The park provides a wide range of facilities to interest visitors. Visitor centers at Furnace Creek and Scotty’s Castle include interpretive displays, staffed information desks, guided tours of the Castle, and ranger programs at Furnace Creek. Staffed information stations operate year-round at Beatty and Stovepipe Wells and less frequently at Grapevine, Wildrose, and Shoshone.



Roads developed by early miners and ranchers provide easy car access to popular sites and to more remote locations. Most visitor destinations are natural formations and vistas, but indoor destinations include Scotty’s Castle and the Borax Museum. The park maintains nine campgrounds, many of them wheelchair accessible, and there are many backcountry cabins scattered around the park. A commercial resort operates Furnace Creek Inn and Ranch and more modest lodging at Stovepipe Wells.

**Air Tour Operations.** Visitors may gain an aerial perspective on the park’s natural features by taking an air tour flying out of Las Vegas. The FAA has granted Interim Operating Authority (IOA) at DEVA to seven commercial air tour operators. These seven operators have been granted IOA for a total of 67 annual flights as shown below.

OPERATOR	DOING BUSINESS AS	IOA FLIGHTS PER YEAR
Courtney Aviation, Inc	Courtney Aviation	4
Heli USA Airways, Inc	Heli USA	6
King Airlines, Inc		12
Las Vegas Helicopters, Inc		12
Maverick Helicopters, Inc		15
Papillon Airways, Inc	[Papillon] Grand Canyon Helicopters	12
Sundance Helicopters, Inc	Sundance Helicopters, Helicopter Services, Helicop Tours	6