Biodiversity: The Fountain of Life

What does a desert bighorn sheep have in common with a golden eagle; a roadrunner with a Joshua tree; and a Panamint daisy with a desert pupfish? All of these diverse living beings are native to Death Valley, and contribute to the diversity of life on our planet. Death Valley’s varied environments, from salt pan to Telescope’s towering peak, provide habitats for diverse flora and fauna. Death Valley is home to over 900 species of plants, 300 birds, 50 mammals, 37 reptiles, 6 fish, and countless invertebrates. As such, Death Valley is an essential stronghold of biological diversity.

Biodiversity takes many forms here in Death Valley. The desert bighorn and golden eagle range throughout the Southwestern United States, but find a sanctuary in Death Valley. Here they are protected from poaching and habitat destruction. The Joshua tree and roadrunner thrive here in their favored Mojave Desert ecosystem and are able to develop a strong gene pool to help cope with future environmental stresses. The desert pupfish and the Panamint daisy show us Death Valley’s crucial value in protecting rare, endangered, and endemic plants and animals.

An endemic species is one that survives in a single isolated region or location. The Panamint daisy grows only in Death Valley’s ecosystem. Death Valley’s most noted endemics are the desert pupfish. The Devil’s Hole pupfish, another endemic, survives in only one location in the entire world, within Death Valley National Monument. These rare desert pupfish show us the multifaceted values and importance of a planet rich in biodiversity. These values range from scientific to medical, educational to ecological, aesthetic to cultural, and include the pure and simple enjoyment we receive from the natural world and its variety of creatures. We can marvel at a fish that survives in the hottest and driest desert in North America, and perhaps someday learn about our own kidney functions by studying the pupfish’s ability to tolerate super-saline water.

Death Valley is vital habitat to 10 rare and endangered species, including the desert tortoise and mountain lion. For many plants, animals, birds, insects, and mammals, Death Valley may be the last chance of survival into the future. Species around the world are encountering similar and severe threats to their survival.

Prior to the 20th century, biological extinction equalled the loss of one species every two years. Currently we are losing one species each day. At these rates of habitat loss, pollution, and poaching, we will lose one creature from the face of the earth every minute by the year 2000. Biodiversity has been a fountain of life, giving us clean air, clean water, climatic stability, and sources of food, medicine, and endless enjoyment and discovery. Our national parks and monuments hold one key to preventing the springs of biodiversity from running dry. We must keep Death Valley a valley of life, where the desert bighorn, golden eagle, bristlecone and Joshua tree, roadrunner, Panamint daisy, and desert pupfish will forever flourish.

Death Valley as a Biosphere Reserve

The biosphere is a narrow zone of air, water and soil surrounding the Earth, the only place in the known universe where the proper conditions exist to support life. For millions of years the biosphere regulated itself, until the arrival of modern human society. Human caused environmental damage prompted UNESCO (United Nations Educational, Scientific and Cultural Organization) to initiate a program in 1971 aimed at better care of the worldwide environment. It was named Man and the Biosphere (MAB); its main goal: to improve the relationship of humans with their global home, the biosphere.

As part of MAB, an international network of Biosphere Reserves was begun in 1976. By 1987 the network had grown to 266 units in 70 countries. These protected areas serve many purposes: conservation of biological resources, research on natural systems, monitoring of human caused change, and perpetuation of traditional land use methods. Cooperation between countries and exchange of information are also promoted by the program.

Death Valley National Monument became part of the Mojave and Colorado Deserts Biosphere Reserve in 1985. Three other areas — Joshua Tree National Monument, Anza Borrego Desert State Park and the Santa Rosa Mountains Wildlife Management Area — make up the rest of the reserve. Death Valley is the largest of the four units and provides invaluable habitat for species such as the Desert Bighorn sheep, desert pupfish and about two dozen species of plants unique to Death Valley.

Another emphasis of biosphere reserves is indigenous peoples and their relationship to the land. Many indigenous peoples maintain a spiritual and nurturing attitude toward nature, an attitude from which our own society may be able to learn in the context of biosphere reserves. Death Valley has been home to the Timbisha Shoshone (a Native American tribe) for nearly 1,000 years.

The U.S. National Park Service administers 25 biosphere reserves. Many of these, such as Death Valley, are just now defining how to best participate in the MAB program.
BEATING THE HEAT

Keeping cool in Death Valley during hot weather is more than a matter of comfort. Your safety - even your survival - depends on it. Whether you plan to experience Death Valley solely by car or by hiking, know the dangers of heat and dehydration and avoid them.

Take care of your car:
- Drink plenty of water. High evaporation rates as well as temperatures make it very important to drink fluids. Drink before you are thirsty. Carry water with you in your car and when hiking; at least one gallon per person per day is recommended.
- Protect your feet from high ground temperatures. Wear thick-soled shoes to cool by protecting against solar radiation and retaining perspiration.
- Watch the temperature of your car motor. If your car begins to overheat, turn off the air conditioner. Radiator water is available at many points in Death Valley. To cool an overheated engine: turn off the motor; wet down the radiator core by pouring water over it while running the engine on high idle; when radiator is cool enough to take cap off, refill to proper level if necessary and proceed.
- Check gasoline and oil. Gas is available at Furnace Creek, Stovepipe Wells and Scotty’s Castle within the monument.
- Stay with your car if it breaks down. Another traveler can let a ranger know that you are in trouble. Do not try to walk for help.
- Keep your car motor cool by keeping it off idle; when radiator is cool enough to take cap off, refill to proper level if necessary and proceed.

If you choose to hike:
- Wear protective clothing. A hat and sunglasses are indispensable. Clothing will help you keep cool by protecting against solar radiation and retaining perspiration. Wear thick-soled shoes to protect your feet from high ground temperatures. Take care of your car.
- Watch the temperature of your car motor. If your car begins to overheat, turn off the air conditioner. Radiator water is available at many points in Death Valley. To cool an overheated engine: turn off the motor; wet down the radiator core by pouring water over it while running the engine on high idle; when radiator is cool enough to take cap off, refill to proper level if necessary and proceed.
- Be careful of hazards. Beware of spiny plants, dangerous mine shafts and tunnels, and poisonous animals. Don’t put your feet and hands where you cannot see.

Hopefully these suggestions will not only make your visit to Death Valley in summer a safe one, but also more enjoyable.

NATIONAL PARKS . . .

OUR ISLANDS OF HOPE

Why are national parks important? Is there something special about parks beyond the obvious — that is, places of natural beauty or of historic interest to visit? Parks with natural resources provide opportunities to study the plants, animals, and land features which are protected and managed in a way to let nature take its course. They provide a test to see if we are capable of preserving wild species and to provide gene pools to maintain the species. As a specific example, Death Valley, one of 354 park areas within the United States, has species of endangered pupfish, and several endemic plants.

Historic or cultural resources provide us with a touch of our past. Death Valley’s several thousand archeological sites cover 9,000 years of human history. Death Valley’s numerous mine camps dating from the 1870s provide a story of man searching for riches and examples of mining methods and techniques used over a century. The past, as preserved in our parks, may provide lessons for the future, and gives us a tie to our heritage.

Parks also have recreational and social values for humans. Parks teach us about ourselves, where we can meet and interact with others — while together gaining insight to places that give our lives meaning, and where we can learn to respect the land. Parks also provide a sense of time. Parks are places where we can confront and dispel our fears. Parks are places where we can find solitude and refreshment for the soul. Parks are places to hike, to photograph, to camp, or to just relax . . .

And thus, on behalf of the United States Department of the Interior, the National Park Service, and the staff of Death Valley National Monument, I welcome you to the area as our guests during your visit. We hope that your stay will be as enjoyable as it is memorable. If we can help in any way simply ask the men and women in the Park Service green and grey.

Edwin L. Rothfuss
Superintendent
A Day in Death Valley

The first step in planning your visit in Death Valley requires a stop at the Furnace Creek Visitor Center located near the geographic center of the monument. Maps, general information and a museum are available. If you find yourself with only one day to spend in Death Valley, there are a few areas that you will not want to miss. Below are some suggestions, the time required and round-trip mileages from the Furnace Creek Visitor Center. All of these areas can be reached with any automobile.

1-2 Hours
- Badwater, Devil’s Golf Course and Artist’s Drive, 44 miles OR
- Zabriskie Point and Twenty Mule Team Canyon, 17 miles OR
- Salt Creek and the Sand Dunes, 42 miles OR
- Golden Canyon (walk), 6 miles OR
- Harmony Borax Works (walk), 3 miles

2-4 Hours
- Any combination of the above OR
- Dante’s View (steep road), 50 miles OR
- Keane Wonder Mine and Mill (walk), 40 miles OR
- Mosaic Canyon (walk), 55 miles OR
- Natural Bridge (walk), 32 miles

4 Or More Hours
Any combination of the above OR
- Scotty’s Castle and Ubehebe Crater, 115 miles OR
- Charcoal Kilns, 140 miles

Many other areas in and around Death Valley are accessible to trucks and 4-wheel-drive vehicles. Additional information is available at the Furnace Creek Visitor Center. Please drive carefully and have a pleasant visit.

Ein Tag im Todestal (Death Valley)

1-2 Stunden
- Badwater (Hochober Meeresspiegel: 86 Meter/282 Fuss), Devil’s Golf Course und Artist’s Drive, 69 Kilometer/44 Meilen ODER
- Zabriskie Aussichtspirke und Twenty Mule Team Canyon, 26 Kilometer/17 Meilen ODER
- Salt Creek Spazierweg (0,8 km/0,5 mi. lang) und die Sand Duenen, 64 Kilometer/42 Meilen ODER
- Golden Canyon (Spaziergang der Canyon hinauf 1-5 km.), 10 Kilometer/6 Meilen ODER
- Harmony Boraxwerke und Ruinen Spazierweg (0,5 km/0,25 mi. lang), 6,4 Kilometer/3 Meilen

2-4 Stunden
- Jede Verbindung von zwei der obenerwähnten Auswahlen ODER

Mehr als 4 Stunden
- Jede Verbindung von zwei der obenerwähnten Auswahlen ODER

Un jour dans la vallée de mort
Si vous êtes en train d’arranger votre séjour dans la vallée de mort, nous vous proposons une visite au Furnace Creek Centre des Visiteurs et au Musée (Visitor Center) tout d’abord; cet édifice se trouve plus ou moins au centre géographique du monument national. Là, vous recevez des cartes et renseignements généraux. Si vous ne restez qu’un jour dans la vallée, nous vous recommandons de visiter les endroits décrits au-dessous. Les temps de voyages et les distances (aller-retour) sont aussi donnés. Vous avez accès à tous ces endroits en voiture.

En outre, il y a plusieurs endroits accessibles aux voitures à quatre roues; demandez des renseignements supplémentaires à ce sujet au Visitor Center. Nous vous prions de conduire avec prudence et vous souhaitons un séjour agréable.

1-2 Heures
- Badwater (altitude au-dessous du niveau de la mer: 86 m/282 ft), Devil’s Golf Course et Artist’s Drive, 69 kilomètres/44 miles OUI
- Le point de vue Zabriskie et Twenty Mule Team Canyon, 26 kilomètres/17 miles OUI
- La promenade de Salt Creek (une distance de 0,8 km/0,5 mi.), et les Dunes de Sable, 62 kilomètres/42 miles OUI
- Golden Canyon (promenade de 1-5 km. distance possible), 10 kilomètres/6 miles OUI
- Harmony Borax (mines et ruines avec une promenade de 0,5 km./0,25 mi. distance), 6,4 kilomètres/3 miles.

2-4 Heures
- Toute combinaison des choix donne au-dessus OUI
- La vue de Dante (rue tres raide au fin), 80 kilomètres/50 miles. Altitude: 1669 metres/5475 pieds OUI
- Keane Wonder (mines et ruines avec une promenade de 3,2 km./2 m. distance possible), 64 kilomètres/40 miles OUI
- Mosaic Canyon (promenade de 1-4 mi./0,5-2 mi. distance), 84 kilomètres/55 miles OUI
- Natural Bridge Canyon (promenade de 1-3 km./0,5-1,5 mi. distance possible), 52 kilomètres/32 miles

Plus que 4 Heures
- Toute combinaison des choix donne au-dessus OUI
- Le chateau de Scotty et le Crater de Ubehebe, 180 kilomètres/115 miles. Altitude: 914 metres/3000 pieds. Promenade du crater: 5 minutes pour descendre et 20 minutes pour remonter OUI

Death Valley Visitor Guide
The Death Valley Visitor Guide is a publication of the Death Valley National Monument in cooperation with the National Park Service. This publication is produced to inform and aid the park visitor.

Editors: ___________________ Kayci Cook, Ely Fields, Mara Meisel
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CAMPING

Death Valley National Monument operates nine campgrounds throughout the monument, with more than 1,500 campsites. All of these campsites are available on a first-come, first served basis. Heavy periods of use are holidays and during the annual Death Valley '49ers Encampment held each November. Camping is not permitted along roadsides, parking lots or day-use only areas. Backcountry camping is permitted in many areas; ask at the Visitor Center or a Ranger Station.

Services available at each campground are listed below. Electric, water, and sewer hook-ups for trailers and motorhomes are available for trailer, motorhome and tent-only sites, water, tables, fireplaces, flush and pit toilets, dump station. Pay showers, laundry and swimming pool available at Furnace Creek Ranch.

SOME REGULATIONS:

- All vehicles must stay on established roads or in parking areas. Vehicles and their drivers must be properly licensed.
- Quiet hours are from 10 p.m. to 7 a.m. Generators may be operated from 7 a.m. to 7 p.m. but their operation is prohibited at Texas Spring Campground.
- Where provided, fireplaces may be used for campfires. Where they are not, fires are restricted to portable stoves. Wood is available at general stores at Furnace Creek and Stovepipe Wells. Wood gathering is not permitted.
- Hunting is illegal. Although wildlife may be attracted to your campsite, resist the urge to feed them, for your safety and their well-being. Please leave your campsite as clean as you found it, or cleaner. Dispose of trash and waste water in proper receptacles.
- Pets must be confined or leashed at all times and owners are responsible for disposing of pet litter in trash cans.
- Your cooperation in helping to protect the monument, so that others who follow will be able to enjoy the same things you have enjoyed, will be appreciated.
- Group camping: Campsites for groups of 10 to 150 people are available at Texas Spring and Mesquite Campgrounds on a reservation basis. The cost is $1.00 per person per night. Reservations for group sites must be made in advance. Send requests to Superintendent, Death Valley National Monument, Death Valley, CA 92328.

FURNACE CREEK


TEXAS SPRING


SUNSET

Elevation: -190'. No. Sites: 1,000. Fee: $4.00. Season: Nov.-Apr. Limit of stay: 30 days. Location: 1 mi. south of Visitor Center. Facilities: Primarily for RVs, some tent-only sites, water, no fires, flush and pit toilets, station. Pay showers, laundry and swimming pool available at Furnace Creek Ranch.

STOVEPIPE WELLS


EMIGRANT


MESQUITE SPRING

Elevation: 1,800'. No. Sites: 50. Fee: $5.00. Season: all year. Limit of stay: 30 days. Location: 4 mi. south of Scotty's Castle. Facilities: Sites for RVs and tents, group sites, water, tables, fireplaces, flush toilets, dump station.

WILDROSE


THORNDIKE

Elevation: 7,500'. No. Sites: 8. Fee: none. Season: Mar.-Nov. Limit of stay: 30 days. Location: 8 mi. east of Wildrose Campground. Road not passable for trailers, campers or motorhomes; high-clearance or 4-wheel drive may be necessary. Facilities: Tables, fireplaces and pit toilets.

MAHOGANY FLAT

Elevation: 8,200'. No. Sites: 10. Fee: none. Season: Mar.-Nov. Limit of stay: 30 days. Location: 1 mi. east of Wildrose Campground. Road not passable for trailers, campers or motorhomes; high-clearance or 4-wheel drive may be necessary. Facilities: Tables, fireplaces, pit toilets.

REGULATIONS

YOU share responsibility for protection of Death Valley National Monument. Because this land and its resources belong to everyone, no one may collect or disturb any animal, plant, rock, fossil or any other natural, historical or archeological feature.

VEHICLES OF ALL KINDS, including four-wheel drives, motorcycles and bicycles, must stay on designated roads. Off-road tire tracks last for years in this fragile desert. All motorized vehicles and their drivers must be properly licensed.

DEVELOPED CAMPGROUNDS provide sites for tents, trailers and motorhomes. Camping is limited to no more than 30 days per year (October 1 through September 30) throughout the monument. Camping limits are 14 days at Furnace Creek Campground and 30 days at all others. Quiet hours are from 10 p.m. to 7 a.m. Generators may be operated, except at Texas Spring Campground, from 7 a.m. to 7 p.m. Campfires are allowed only in fireplaces or portable stoves but wood collecting is prohibited. Pets must be on a leash at all times.

BACKCOUNTRY CAMPING is allowed in many areas: one mile back from main paved or unpaved roads and one-quarter mile from water sources. Most abandoned mining areas are restricted to day-use only. Check the Dirt Road Travel and Backcountry Camping guide, available at the visitor center, for restrictions and consider completion of a voluntary backcountry registration form for your own safety.

SAFETY

ROADS were built for sightseeing, not for speed. In places their grades are steep. Flash floods can turn dikes into rivers and deposit mud and rocks on roadways. Drive carefully on designated roads only and obey all posted signs and speed limits.

WEATHER can be extreme. Storms and resulting flash floods are possible year-round. Avoid canyon hiking in bad weather and if you are in a low-lying area during a storm, climb to higher ground. Backcountry roads often become impassable after a rain, so check with a ranger on conditions. The hot weather season here includes fall and spring; be sure to carry and drink plenty of water and watch your car's temperature gauge.

HIKING will bring you closer to Death Valley's unique sights but be sure that you are prepared. Check the weather beforehand, carry lots of water, wear comfortable shoes, and for longer hikes, fill out a voluntary backcountry registration form.

WILD ANIMALS are just that, wild. Do not feed or bother them. Humans must share the desert with poisonous creatures such as scorpions and rattlesnakes. Do not reach into holes or burrows and do not place hands and feet where you cannot see them.

ABANDONED MINES can be dangerous. Vertical shafts are invisible from within dark tunnels and a fall could be fatal. Wooden supports can give way at any time. Do not explore mine openings without asking if the area is safe. If you would like to visit safe mining areas, ask for suggestions at the visitor center.

IN CASE OF EMERGENCY

Contact any Park Ranger, or call: 911 or (619) 786-2331 (day) (619) 786-2330.
Hiking and Backpacking Trips

Self-Guiding Trails

GOLDEN CANYON TRAIL
2 miles round trip.
On Badwater Road, 5 miles south of Visitor Center.

HARMONY BORAX WORKS
1/4 mile round trip.
On Hwy. 190, 2 miles north of Visitor Center.

SALT CREEK NATURE TRAIL
1 mile round trip.
1 mile off Hwy. 190, 23 miles north of Visitor Center.

SAND DUNES
1/4 mile round trip.
Begin either from Hwy. 190, 2 miles east of Stovepipe Wells or from Sand Dunes Picnic Area, 19 miles north of Visitor Center.

WILDROSE CHARCOAL KILNS
1/4 mile round trip.
7 miles east of Wildrose Campground.

SCOTTY'S CASTLE WALKING TOUR
1/2 mile round trip.
At Scotty's Castle, 53 miles north of Visitor Center.

WINDY POINT TRAIL
3/4 miles round trip.
At Scotty's Castle, 53 miles north of Visitor Center.

TIE CANYON TRAIL
7/10 mile round trip.
At Scotty's Castle.

Gradual uphill trail through colorful badlands. Extend your hike to Zabriskie Pt. or Red Cathedral. Best light in late afternoon.

TELESCOPE PEAK TRAIL
14 miles round trip.
Begin at Mahogany Flat Campground (or Charcoal Kilns - add 4 miles to total), 9 miles east of Wildrose Campground.

Graduated rock formations above the desert floor.

KEANE WONDER MINE
2 miles round trip.
3 miles off Beatty Cut-Off Road, 16 miles northeast of Visitor Center; access road can be rough.

GROTTO CANYON
2-6 miles round trip.
1.5 miles off Hwy. 190, 2.5 miles east of Stovepipe Wells; access road requires high clearance vehicle.

NATURAL BRIDGE CANYON
2-11 miles round trip.
2 miles off Scotty's Castle Road, 37 miles north of Visitor Center.

DIFFICULT HIKES

MOSAIC CANYON
1-4 miles round trip.
3 miles off Hwy. 190, just west of Stovepipe Wells; access road can be rough.

WILDEROSE PEAK TRAIL
8 miles round trip.
Begin at Charcoal Kilns, 7 miles east of Wildrose Campground.

In winter, ice axes and crampons may be required; check at Visitor Center. Steep trail winds through pinyon-juniper and bristlecone pine. Fantatic views of both Death Valley and Panamint Valley.

Even after death, a bristlecone pine continues to transfigure its surroundings. Great old snags stand like bleached tombstones, finally tottering only when the bases of their roots rot away, unbalancing them. Or water drips into cracks in their dried surfaces, freezes and shaws, and eventually splits off massive slabs, exposing to the light wood that has reflected none in its thousands of years.

Ronald M. Lanner

Cross-Country or Backpack Trips

Death Valley's backcountry is virtually limitless but there are few maintained trails through it. Many people choose to hike cross-country or along backcountry roads. Topographic maps, hiking guides and voluntary backcountry registration are available at the Visitor Center.

Water sources in the monument are not reliable and in some cases not safe to drink. Bring your own water, at least 1 gallon per person per day, or cache it ahead of time along your route.

Primitive camping is allowed in many backcountry areas. Check the Dirt Road Travel and Backcountry Camping guide, available at the Visitor Center, for restricted areas. Generally, camping is permitted one mile from main roads and one-quarter mile from any water source.

Depending on your pace and the length of the hike, these may be day-hikes or backpacking trips. In either case, you are encouraged to complete a backcountry registration form at any Ranger Station or the Visitor Center.

MOSAIC CANYON
1-4 miles round trip.
3 miles off Hwy. 190, just west of Stovepipe Wells; access road can be rough.

OTHER SHORT HIKES/ LONGER DAY HIKES

GOLDEN CANYON TO ZABRISKIE POINT
5 miles round trip.
On Badwater Road, 3 miles south of Visitor Center.

MOSAIC CANYON
1-4 miles round trip.
3 miles off Hwy. 190, just west of Stovepipe Wells; access road can be rough.

NATURAL BRIDGE CANYON
2-11 miles round trip.
2 miles off Scotty's Castle Road, 37 miles north of Visitor Center.

DIFFICULT HIKES

WILDEROSE PEAK TRAIL
8 miles round trip.
Begin at Charcoal Kilns, 7 miles east of Wildrose Campground.

TELESCOPE PEAK TRAIL
14 miles round trip.
Begin at Mahogany Flat Campground (or Charcoal Kilns - add 4 miles to total), 9 miles east of Wildrose Campground.

In winter, ice axes and crampons may be required; check at Visitor Center. Steep trail winds through pinyon-juniper and bristlecone pine. Fantatic views of both Death Valley and Panamint Valley.

Even after death, a bristlecone pine continues to transfigure its surroundings. Great old snags stand like bleached tombstones, finally tottering only when the bases of their roots rot away, unbalancing them. Or water drips into cracks in their dried surfaces, freezes and shaws, and eventually splits off massive slabs, exposing to the light wood that has reflected none in its thousands of years.

Ronald M. Lanner

Hiking Safety

Between seasonally high temperatures and rates of evaporation, the potential for dehydration while hiking in Death Valley is great. Be sure to carry plenty of water, regardless of your intentions to hike "only a short distance." Drink your water; it does you no good in the canteen! Do not rely on natural water sources, as many are mineralized or polluted by burros.

Wear appropriate clothing, remembering that between the valley floor and highest mountains the elevation change is over 11,000 feet (3,400 m); temperatures will vary accordingly. Comfortable shoes, a hat and sunglasses are common-sense items year round.

NATURAL BRIDGE CANYON
2-11 miles round trip.
2 miles off Scotty's Castle Road, 37 miles north of Visitor Center.

Hiking Safety

Between seasonally high temperatures and rates of evaporation, the potential for dehydration while hiking in Death Valley is great. Be sure to carry plenty of water, regardless of your intentions to hike "only a short distance." Drink your water; it does you no good in the canteen! Do not rely on natural water sources, as many are mineralized or polluted by burros.

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CASTLE RESTORATION PROGRESSES

Who says wood doesn't rot in the desert? As part of a program to preserve exterior redwood decoration on historic Scotty's Castle in the north end of Death Valley, inspections were made by the Maintenance crew. They revealed rotten support timbers in the second floor lanai, or screened porch, of the Castle annex.

The original design proved to have caused the rot. Vertical posts were held in place by dropping them into pockets in the concrete floor. These holes collected water and created a perfect environment for decay. It doesn’t rain a lot in Death Valley, but 60 years of moisture was enough to rot at least 2-3 inches off each support post.

Upon disassembling the lanai, more rot was found in the joints of overhead timbers. Clearly the work was more complicated than first thought. The crew began the complex process of preserving the porch in October, and is working on it at the time permits.

Preservation of historic structures is quite different from ordinary repair that we might do to our homes. Specialized techniques and procedures are required. Great care must be taken to prevent damaging delicate historic fabric. For these reasons preservation projects usually take much longer to complete than simple repairs.

In keeping with the National Park Service philosophy of preservation, any salvageable parts are kept. When the lanai was disassembled, parts were carefully marked to ensure identical reassembly. Damaged timbers are scraped clean of decay, stabilized with a liquid consolidant and repaired with structural epoxy and internal fiberglass rods. Visible areas are repaired with a cosmetic epoxy that can be tooled and colored to match.

The original wood is stripped very carefully to remove years of linseed oil build up. It is then stained to match. Any new wood used is charred, brushed, and stained as was done originally.

Although much of the work is being done in the Castle workshop, you will soon be able to see the fruits of the crew’s meticulous and sometimes tedious labor. George Voyta, Exhibits Specialist, anticipates the project will be complete sometime next fall.

Don Creech, maintenance mechanic, fabricates a new beam.

SCOTTY'S CASTLE TOURS

Tour Schedule
Busy Season (Oct. - Apr.) - Hourly, 9 a.m. to 5 p.m.
Summer Season (May-Sept.) - every 1/4 hours, 9:30 a.m. to 5 p.m.

While you wait:
Expect a wait of 1 to 2 hours under normal conditions and 2 to 3 hours during busy holiday periods. Call ahead for an estimated waiting time.

While you wait you can: take one of the 3 self-guided walks at the Castle, 30-45 min.; visit Ubehebe Crater, 60-90 min.; browse the exhibit room; or participate in a ranger-led tour of the grounds (when available), 45 min.

Fees
Tickets are sold the day of the tour on a first-come, first-served basis.

GOLDEN AGE

Age has its advantages. Anyone 62 years or older is entitled to great respect...and a Golden Age Passport.

This lifetime pass provides free entry to national parks for you and those traveling with you in your vehicle. It also entitles you to a 50 percent discount on camping and other user's fees. Golden Age Passports are available free at the Furnace Creek Visitor Center and other entrance fee collection points.

Note: A similar pass, the Golden Access Passport is available free to those with a permanent physical disability.

Death Valley Natural History Association

The Death Valley Natural History Association is a non-profit educational organization dedicated to the preservation and interpretation of the natural and human history of Death Valley National Monument. The cooperation of the Association with the National Park Service is authorized by Public Law.

Death Valley Natural History Association publishes and distributes descriptive park literature and furnishes personnel, equipment, and supplies to support the interpretive work of the National Park Service. Proceeds from the Association’s sales are used to produce new educational publications and to aid National Park Service programs.

Membership in the Association is available to any person who has a sincere interest and desire to advance the aims and purposes of the Association.

As a member you receive the following:
1. 15 percent discount on all purchases.
2. Official Association emblem patch. (Lifetime member patch)
4. First offering on all new publications.

TYPES OF MEMBERSHIP

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<tr>
<th>INDIVIDUAL MEMBERSHIP</th>
<th>FAMILY MEMBERSHIP</th>
<th>SPECIAL MEMBERSHIP</th>
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<td>Five year.............</td>
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<td>Lifetime..............</td>
<td>$100.00</td>
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Please include payment with application either by check made payable to DEATH VALLEY NATURAL HISTORY ASSOCIATION or by credit card. $10.00 minimum on credit cards.

MEMBERSHIP APPLICATION

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All dues and contributions are tax deductible to the extent they exceed benefits.
ACCOMMODATIONS
Furnace Creek Ranch ........................................ 786-2345
Furnace Creek Inn ........................................... 786-2361
Reservations, Inn & Ranch ................................. 786-2345
Stovepipe Wells Village .................................... 786-2387

SERVICE STATIONS
Furnace Creek Chevron .................................... 7:00 a.m. - 7:00 p.m.
Stovepipe Wells Chevron .................................. 7:00 a.m. - 8:00 p.m.
Scotty’s Castle Union 76 .................................. 9:00 a.m. - 5:30 p.m.
Diesel Fuel available at Beatty, Stateline, Lone Pine, Panamint Springs, Olancha and Trona.

AUTO REPAIR AND TOWING
Furnace Creek Garage (AAA) ............................. 786-2232
8:00 a.m. - 4:00 p.m.

CAMPER & TRAILER SERVICES
PROPANE
Furnace Creek Chevron

GENERAL STORES & GROCERIES
Furnace Creek Ranch ....................................... 7:00 a.m. - 9:00 p.m.
Stovepipe Wells .............................................. 7:00 a.m. - 8:00 p.m.

GIFT, BOOKS & APPAREL
Furnace Creek Ranch ....................................... 7:00 a.m. - 9:00 p.m.
Furnace Creek Inn .......................................... 8:00 p.m. - 9:00 p.m.
Stovepipe Wells .............................................. 8:00 a.m. - 8:00 p.m.
Scotty’s Castle .............................................. 8:30 a.m. - 5:30 p.m.

MISCELLANEOUS
ICE
Available at Furnace Creek Chevron

LAUNDROMAT
Furnace Creek Ranch - located on Roadrunner Ave.

POST OFFICE
Furnace Creek Ranch ....................................... 7:00 a.m. - 7:00 p.m.
Closed Saturdays

SHOWERS
Furnace Creek Ranch - check at registration desk
Stovepipe Wells - check at registration desk

SERVICES OF WORSHIP
INTER-DENOMINATIONAL (Sponsored by A Christian Ministry in the National Parks)
Furnace Creek Visitor Center ........................... Sunday 9:00 a.m. & 6:00 p.m.
Stovepipe Wells Auditorium (through April 24) ........ Saturday 6 p.m.
Sunday 9:00 a.m.
Check bulletin boards for time changes during holiday periods.

Furnace Creek Inn and Ranch Resort
Fred Harvey, Inc.

Scotty’s Castle Services
Concessioner, TW Services, Inc.

Stovepipe Wells Village
Concessioner, Fred Harvey, Inc.

RESTAURANTS & SNACK BARS
Furnace Creek Ranch
Coffee Shop ............................................ 7:00 a.m. - 9:30 p.m.
Cafeteria
breakfast .................................................... 5:30 a.m. - 9:00 a.m.
lunch ......................................................... 11:00 a.m. - 1:30 p.m.
dinner (res. req.) ........................................ 5:00 p.m. - 8:30 p.m.
Steak House .............................................. 5:00 p.m. - 9:00 p.m.
(except Sunday)
Corkscrew Saloon ......................................... 11:00 a.m. - 1:00 a.m.
19th Hole Snack Bar and Cocktails .................. 10:00 a.m. - Dusk

Furnace Creek Inn
Dining Room
breakfast .................................................... 7:30 a.m. - 9:00 a.m.
lunch ......................................................... Noon - 1:00 p.m.
dinner (res. req.) ........................................ 5:00 p.m. - 8:00 p.m.
Sunday Brunch ........................................... 11:00 a.m. - 2:00 p.m.
Oasis Supper Club (res. req.) ......................... 6:00 p.m. - 9:30 p.m.

Stovepipe Wells
Dining Room
breakfast .................................................... 7:00 a.m. - 10:00 a.m.
lunch ......................................................... 11:30 a.m. - 2:00 p.m.
dinner ....................................................... 5:30 - 8:30 p.m.
Saloon ....................................................... 4:00 p.m. - 10:00 p.m.
Scotty’s Castle Snack Bar ......................... 8:30 a.m. - 5:30 p.m.

OTHER SERVICES
BIKE RENTALS
Furnace Creek Chevron

DEATH VALLEY SIGHTSEEING TOURS
Furnace Creek Ranch
Registration Office ......................................... 786-2345, Ext. 61

HORSEBACK RIDES
Furnace Creek Ranch - 2 hour rides ............... 8:00 a.m. and 10:30 a.m.
Tickets at Registration Office

GOLF COURSE
Furnace Creek Ranch Pro Shop ......................... 786-2301

SWIMMING POOLS
Furnace Creek Ranch .................................... 9:00 a.m. - 10:00 p.m.
$2.00 charge to non-guests, availability limited
Stovepipe Wells ........................................... 9:00 a.m. - 9:00 p.m.
$1.00 charge to non-guests, availability limited

BARBER SHOP
Located across from Furnace Creek Inn
Every Thursday ........................................ 9:00 a.m. - 4:00 p.m.

BEAUTY SHOP
Furnace Creek Inn ........................................ 9:00 a.m. - 4:00 p.m.
Tuesday through Saturday

A variety of services is available within Death Valley National Monument during the visitor season (October - May 12).
Summer months offer a limited number of services.
DEATH VALLEY NATIONAL MONUMENT MAP

Mileages from Furnace Creek Visitor Center

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Legend

- Paved
- Unpaved

* These roads become impassable when wet; when dry, most can be driven.

EMERGENCY

Dial 911 or 1-619-786-2330 Park Headquarters. Emergency Line or 1-714-383-5651 Interagency Com. Center 24 Hr. Number or contact a Park Ranger.