A VISITOR'S GUIDE TO

DEATH VALLEY

NATIONAL PARK

Year 2001

Water is Lifeblood of the Desert

Death Valley is infamous as a place of heat, salt, and bad water, but it is the freshwater springs that allows for the life here. To this day water controls where life is found and provides the life's blood of all creatures who live here.

As the glaciers retreated from the Sierra Nevada Mountains at the end of the last ice age, Death Valley became a lake-filled basin with abundant water and life. Life teamed in the fresh water lakes and crowded the verdant shores. 10,000 years ago the ancestors of the modern Shoshone and Paiute made their homes along the lake and in the nearby mountains. Life was good, and water brought them life.

Over time, the climate became more arid and the lakes dried up. Even the memory of them faded. The Shoshone people crowded around the only remaining sources of life, the freshwater springs that bubbled out of the ground along the foot of the Funeral Mountains. Each major spring had a major village and the largest village of all, Timbisha, was at what we today call Furnace Creek.

In 1849 a party of pioneers taking a shortcut to the goldfields of California stumbled into the valley. The pioneers were desperate for water, and they too found salvation in the springs at Furnace Creek. In the 1870's the first white settlers, Andrew Laswell and Cal Mowrey entered the valley. They were looking for water to grow crops and alfalfa for the booming mining towns in the Panamint Mountains to the west. Laswell and Mowrey developed hay ranches at both Bennett's Well and Furnace Creek and were the first to dig irrigation ditches to harness the power of the water in the Furnace Creek area.

By the early 1880's, the water at Furnace Creek was controlled by William Tell Coleman and his borax company. The Harmony Borax Works just north of Furnace Creek needed water to extract borax from the salt crusts that lined the ancient lake beds. Texas Spring provided the water for chemical processing, and the irrigation ditches and water from Travertine Springs above Furnace Creek provided water for Coleman's company town of "Greenland". With water, Coleman was able to make a success of his chemical operation and make Death Valley history with his 20 mule teams.

Through the 1920's and 30's, the borax companies that controlled Furnace Creek began to diversify. The warm springs at Furnace Creek became the life's blood of a new industry. Tourism! United States Borax was able to convince officials in the National Park Service that Death Valley was a unique national treasure and should be preserved as a store of natural and cultural history. In 1933 Death Valley was designated a National Monument. Furnace Creek with it's abundant water, shading trees, and resort accommodations became the heart of activity in the new park.

Today the water from Travertine and Texas Springs is the lifeblood of the Furnace Creek Resort area and all of the activities at the campgrounds and visitor center. More than 1,200,000 visitors pass through the area every year, and we use 95% of the more than 1,000,000 gallons of fresh water that the springs produce every day. Furnace Creek is an oasis in an otherwise extremely harsh environment. Water has always shaped and controlled the life that is here. Water is our life's blood.

What's Inside?

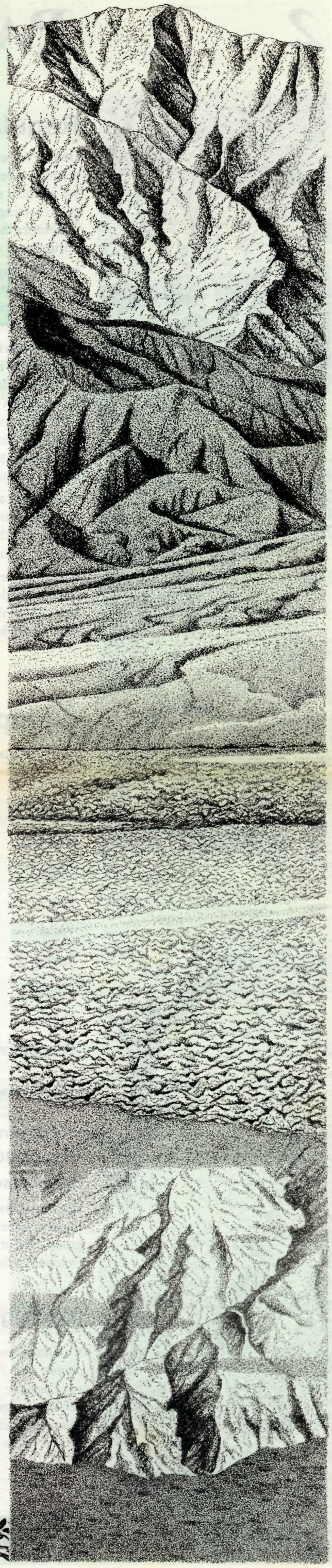
DEATH VALLEY
NATIONAL PARK

Temperatures

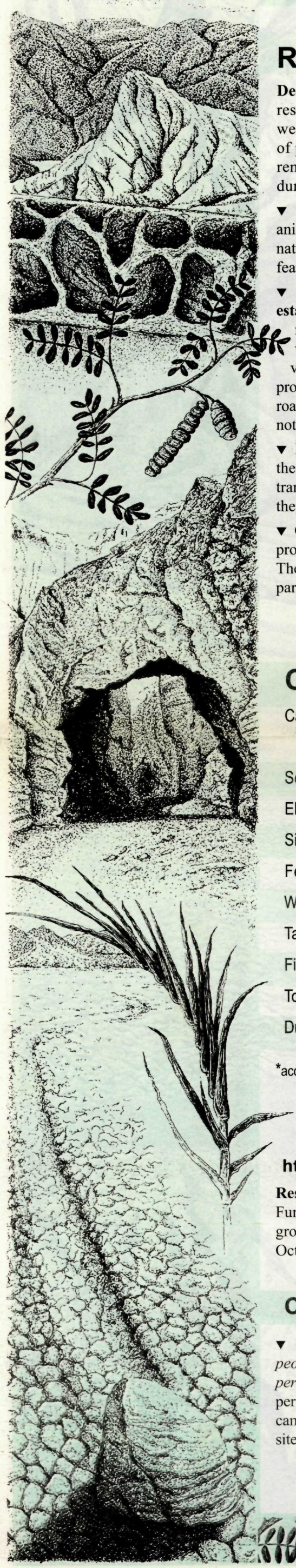
	Average Maximum	Average Minimum
January	**65°F** / 18°C	**39°F** / 4°C
February	**72°F** / 22°C	**46°F** / 8°C
March	**80°F** / 27°C	**53°F** / 12°C
April	**90°F** / 32°C	**62°F** / 17°C
May	**99°F** / 37°C	**71°F** / 22°C
June	**109°F** / 43°C	**80°F** / 27°C
July	**115°F** / 46°C	**88°F** / 31°C
August	**113°F** / 45°C	**85°F** / 29°C
September	**106°F** / 41°C	**75°F** / 24°C
October	**92°F** / 33°C	**62°F** / 16°C
November	**76°F** / 24°C	**48°F** / 9°C
December	**65°F** / 19°C	**39°F** / 4°C

Record Low Temperature: **15°F** / -9°C January 1913
Record High Temperature: **134°F** / 57°C July 1913

Official temperatures recorded at Furnace Creek.



2 Park Information



Regulations Protect Death Valley

Death Valley National Park and its resources belong to everyone, and we all must share the responsibility of protecting this land. Please remember the following regulations during your stay:

▼ **Collecting or disturbing** any animal, plant, rock or any other natural, historical or archeological feature is prohibited.

▼ **All vehicles must remain on established roads.** This includes motorcycles, bicycles, and four-wheel drive vehicles. All motorized vehicles and their drivers must be properly licensed. Vehicles with off-road registration "green stickers" may not be operated in the park.

▼ **Hunting and use of firearms** in the park is illegal. Firearms may be transported through the park only if they are unloaded and cased.

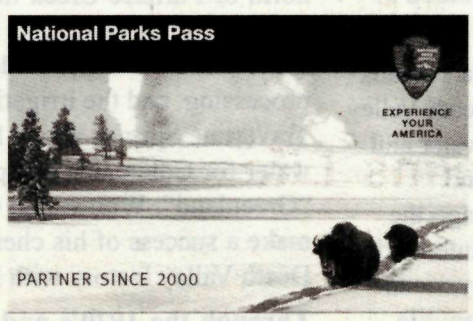
▼ **Campfires are allowed** in firepits provided in developed campgrounds. They are prohibited elsewhere in the park. Gathering wood is unlawful.

▼ **Do not feed or disturb wildlife,** including coyotes, roadrunners & ravens. When wild animals are fed by humans they tend to depend upon this "unnatural food source" rather than forage for their natural diet.

▼ **Keep pets confined or leashed.** Pets are allowed only in developed areas and along paved or dirt roads.

▼ **Camping is limited to developed campgrounds** and some backcountry areas. For more details on backcountry camping and to obtain a free permit, stop at the Furnace Creek Visitor Center or any ranger station.

▼ **Please do not litter.**



National Park Pass Now Available

A new annual pass for the National Parks was introduced in 2000. The **National Park Pass** will allow admission to any National Park unit that charges an admission fee. The cost of the new pass is $50. For persons who visit several National Park areas within the calendar year the pass will be a good bargain. But more importantly, you will become a partner with thousands of others who support the National Parks because 80% of the cost of the National Park Pass will go directly into supporting park programs such as: repairing outdated and overused campgrounds, restoring historic structures in parks or conducting crucial research to track and protect endangered species such as the Devil's Hole pupfish. You can purchase the National Park Pass at any National Park where fees are collected or by visiting the National Park website at **www.nationalparks.org**

Campground Information

Campground	Furnace Creek	Sunset	Texas Spring	Stovepipe Wells	Mesquite Spring	Wildrose	Thorndike*	Mahogany Flat*
Season	all year	Oct-Apr	Oct-Apr	Oct-Apr	all year	all year	Mar-Nov	Mar-Nov
Elevation	-196'	-196'	sea level	sea level	1800'	4100'	7400'	8200'
Sites	136	1000	92	200	30	30	10	10
Fee	$16	$10	$12	$10	$10	free	free	free
Water	yes	yes	yes	yes	yes	non-potable	no	no
Tables	yes	no	yes	some	yes	yes	yes	yes
Firepits	yes	no	yes	some	yes	yes	yes	yes
Toilets	flush	flush	flush	flush	flush	pit	pit	pit
DumpStation	yes	yes	yes	yes	yes	no	no	no

*accessible to high-clearance vehicles only. 4-wheel drive may be necessary.

For camping reservations
call **1-800-365-2267** or visit
http://reservations.nps.gov

Reservations may be made for the Furnace Creek Campground and group sites at Texas Springs for October 15 thorough April 15.

Beginning on the 5th of each month, reservations can be made five months in advance.

RV Hookups are available only at the concession-run Stovepipe Wells RV Park and the privately-owned Panamint Springs Resort.

Texas Springs Campground (Upper Loop) Limits on RV site use may apply in springtime to accomodate increased demand for tent camping space.

Emigrant Campground is closed indefinitely due to problems with the water supply.

Campground regulations: (complete list posted at each campground)

▼ *Group size of no larger than 8 people and 2 vehicles are allowed per campsite.* Only one RV allowed per site. Larger groups wanting to camp together can reserve the group sites at Texas Springs Campground.

▼ *Generator hours are from 7am to 7pm, unless otherwise posted.* These hours are chosen to accommodate the needs of the wide variety of people who use Death Valley's campgrounds. Generators are not allowed at Texas Springs Campground.

▼ *Pets must be kept on a leash (no longer than 6 feet) at all times.* Keeping your pet leashed protects other campers as well as your pet.

▼ *Pet owners are responsible for cleaning up after their pets.*

Desert Survival

Dos and Don'ts of the Desert

▼ **Water:** Do replace the water your body loses through perspiration. Drink a minimum of 1 gallon (4 liters) of water per day - twice that is even better. Always carry plenty of drinking water in your car and especially while hiking.

▼ **Dehydration:** Do watch for the warning signs of dehydration. If you feel dizzy, nauseous or develop a headache, get out of the sun immediately and drink plenty of water. Dampening your clothing will help lower your body temperature. Heat and dehydration can kill.

▼ **Hiking:** Don't hike in the salt flats or other low elevations when temperatures are hot. There is little shade and the reflected sunlight can be intense. Go to the cooler, higher elevations of the park to hike in the summer. Do avoid trampling vegetation, soil crusts and animal burrows when hiking cross country.

▼ **Mine Hazards:** Don't enter mine shafts or tunnels. Besides the obvious dangers of cave-in or falling, some mines contain pockets of bad air and poisonous gas.

▼ **Clothing:** Do dress appropriately for outdoor activities in the desert. A shirt, sunglasses and a broad-brimmed hat are all necessities.

▼ **Flashfloods:** Do pay attention to the weather. Storms and flash floods are possible year round. Avoid canyons during rain storms and be prepared to move to higher ground. Be especially alert while driving at night for water running in washes and across road dips.

▼ **Dangerous Animals:** Don't place your hands or feet where you cannot see first. Venomous creatures such as rattlesnakes, scorpions or black widow spiders may be sheltered there. Although most will avoid humans if they can, humans should also attempt to avoid contact with these animals.

▼ **Pets:** Don't leave your pet in your car. The temperature in a closed car can exceed 130 degrees in a matter of minutes, and your pet could suffer heat stroke or die.

Summer Heat Claims Life

Ingrid and Gerhard Jonas were only a few days into their summer vacation in the United States when they arrived in Death Valley. A guidebook they had brought from home described the hike from Golden Canyon to Zabriskie Point, which proved irresistible to Gerhard. The trail was only a few miles from developed Furnace Creek so it seemed safe. Although he would be getting a late start at noon and the temperature was already more than 100° F (38° C) in the shade, Gerhard believed the hike would take only half an hour to complete. He was mistaken. Even on a mild winter day the nearly three mile hike over highly eroded badlands takes 1½ to 2 hours. He was also mistaken to think he would need less than a liter of water to complete the hike on that hot June day, which was becoming hotter by the minute.

Ingrid agreed to drive around and meet him at Zabriskie Point. From the viewpoint she could watch for Gerhard to cross over the colorful landscape. Three hours after their arranged rendezvous time there was still no sign of him; she became worried enough to seek help. She told rangers at the visitor center about her overdue husband and a search was begun in 112° F (45° C) heat. A quick overflight in the park airplane revealed a figure fitting his description in lower Gower Gulch, the next drainage south of Golden Canyon. Although rangers reached Gerhard only 1½ hours after he was first reported missing and only 5 hours after he had started his hike, he was dead. Heat stroke proved to be the culprit.

Death Valley National Park now receives more than one million visitors a year. In recent years, the biggest increase in visitation has been in summer months. People from around the globe are able to travel through the sweltering heat of the valley in the comfort of air conditioned cars. With that ease of travel, visitors often underestimate the dangers of being in one the hottest places in the world.

Could this death have been prevented? With better planning, better timing, and enough water this story may have ended differently. (See "Dos and Don't of the Desert" above for more details.) We must all learn to respect the desert to enjoy it safely.

Hantavirus

Hantavirus is considered to be a rare disease and although no cases have been reported from Death Valley, there is a potential hazard here because of the valley's large rodent population. Several different species of rodents can carry Hantavirus, but the primary carrier is the deer mouse. Rodents shed the virus in their droppings, urine, and saliva. When droppings are disturbed by humans the viral particles can become airborne. Breathing in the viral particles is probably the most common way that the infection is transmitted. Rodent bites can also transmit the virus as can eating rodent contaminated food. Infection can also occur by touching eyes, nose or mouth with contaminated hands. Hantavirus cases are often associated with cleaning rodent infested buildings and vehicles that have been closed off or abandoned. Hikers and campers can be exposed when staying in infected trail shelters, old cabins and campsites

Useful Precautions:

▼ **Avoid coming into contact** with rodents and rodent burrows or disturbing dens (such as pack rat nests).

▼ **Air out, then disinfect** cabins or shelters before using them. These places often shelter rodents. Avoid buildings that have been closed for extended periods and show signs of rodent activity.

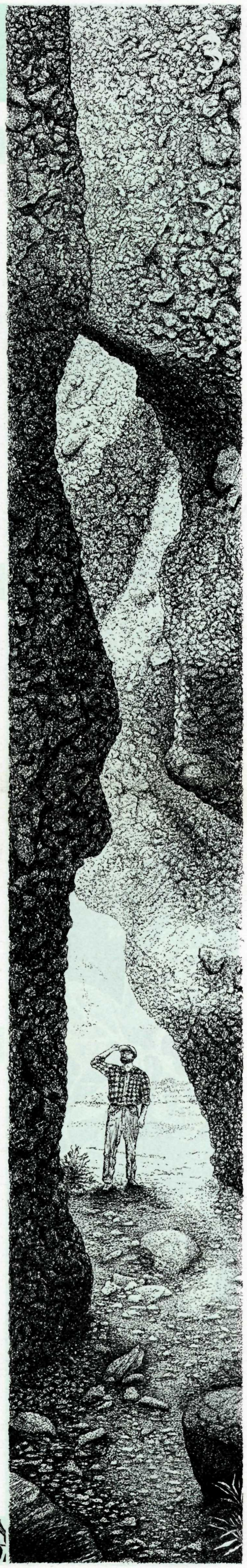
▼ **Do not pitch tents or place sleeping bags** in areas in proximity to rodent droppings or burrows or near areas that may shelter rodents or provide food for them (e.g., garbage dumps or woodpiles).

▼ **If possible, do not sleep on the bare ground.** In shelters, use a cot with the sleeping surface at least 12 inches above the ground. Use tents with floors or a ground cloth if sleeping in the open air.

▼ **Keep food** in rodent-proof containers!

▼ **Use only bottled water** or water that has been disinfected by filtration, boiling, chlorination, or iodination for drinking, cooking, washing dishes, and brushing teeth.

▼ **And last but not least, do not play with** or handle any rodents that show up at the camping or hiking site, even if they appear friendly.



In a Day's Drive

English

Your visit to Death Valley should begin at the Furnace Creek Visitor Center. Here you will find park interpretive staff available to answer questions and help you make the most of your visit.

The bookstore operated by the Death Valley Natural History Association offers guidebooks, maps and other interpretive resources.

▼ Drink water-at least 4 liters per day.
▼ Stay on paved roads in summer.
▼ Never leave your car if it breaks down. Wait until someone comes who can summon help.

Español

Su visita a Death Valley debe empezar en el Furnace Creek Visitor Center. Aquí Ud. va a encontrar a personal que puede darle mapas y información sobre el parque a Usted.

En la librería del Death Valley Natural History Association vende guías, mapas, y libros sobre la naturaleza y historia de la área.

▼ Tome Ud. por le menos 4 litros de agua cada día.
▼ No salga de los caminos pavimentados durante el verano.
▼ Nunca deje su coche si se averia. Espere por ayuda.

Français

Votre visite de Death Valley devrait commencer au Furnace Creek Visitor Center. Vous y trouverez le personnel du Parc National qui pourra répondre à vos questions et vous aider à profiter au mieux de votre visite.

La librairie tenue par la Death Valley Natural History Association vous offre des guides, des cartes géographiques et autres brochures d'information.

▼ Buvez de l'eau-au moins 4 litres par jour.
▼ Restez sur les routes gourronnées.
▼ Si une difficulté surgit, restez avec la voiture. Un autre voyageur arrivera avant que vous puissiez marcher jusqu'a le secours.

Deutsch

Am besten beginnen Sie Ihren Besuch im Death Valley im Furnace Creek Besucherzentrum. Das Personal des Nationalparks wird Ihnen gerne alle Ihre Fragen beantworten und Ihnen helfen, das Beste aus Ihren Besuch zu machen.

In der Buchhandlung der Death Valley Natural History Association erhalten Sie darüber hinaus lokale Reiseführer, Bücher, Landkarten und Informationsmaterial.

▼ Trinken Sie pro Person mindestens 4 Liter Wasser pro Tag!
▼ Bleiben Sie mit Ihren Fahrzeug auf den asphaltierten Strassen!
▼ Kommt es zu einer Panne, warten Sie bei, bzw. in Ihrem Fahrzeug auf Hilfe, bzw. jemanden. der Hilfe holen kann. Verlassen Sie nicht das Fahrzeug!

Italiano

La vostra visita a Death Valley dovrebbe cominciare dal Visitor Center di Furnace Creek, dove il personale del parco é a vostra disposizione per rispondere ad eventuali domande ed aiutarvi rendere il vostro soggiorno il piu piace vole possibile.

La libreria, gestita dalla Death Valley Natural History Association, offre guide, mappe topografiche e altre informazioni generali.

▼ Bere acqua-almeno 4 litri al giorno.
▼ Guidare solo su strada alfalta.
▼ In caso di difficolta non abbandonare mai la vostra automobile. Attendere-chiedere assistenza alle auto di passaggio.

Tours / Excursións / Voyages / Reises / Viaggios

Time required and round-trip mileages from the Visitor Center are included.
Duración y distancia de ida y vuelta del Visitor Center.
Le temps necéssaire et les distances aller et retour.
Die erforderlichen Zeiten und Distanzen (hin und zurück) sind vom Besucherzentrum ausgehend angeführt.
Il kilometraggio ed il tempo necessario per compiere il viaggio di andata e ritorno.

1 - 3 hours / horas / heures / Stunden / ore

▼ Badwater
▼ Devil's Golf Course
▼ Artist's Drive*
▼ Golden Canyon

Distance/Distancia/Distanz/Distanza:
41 miles/66 km

***or**/o/ou/oder*

▼ Zabriskie Point
▼ 20 Mule Team Canyon*
▼ Dante's View*

Distance/Distancia/Distanz/Distanza:
50 mi./80 km

or/o/ou/oder

▼ Sand Dunes
▼ Mosaic Canyon
▼ Salt Creek

Distance/Distancia/Distanz/Distanza:
52 mi./84 km

4 + hours / horas / heures / Stunden / ore

▼ Scotty's Castle
▼ Ubehebe Crater
▼ Titus Canyon Narrows*

Distance/Distancia/Distanz/Distanza:
118 mi./190 km

***or**/o/ou/oder*

▼ Wildrose Charcoal Kilns*

Distance/Distancia/Distanz/Distanza:
126 mi./200 km

*Vehicle restrictions may apply / Restricciones de vehicúlos apliquen ./ Restrictions de vehicule peuvent s'appliquer / Fahrzeugbeschränkungen bleiben vorbehalten / Restrizioni di machina potranno occore

Discovery

Exploring the Natural & Historic Wonders

Death Valley National Park has 3.3 million acres of desert and mountains, making it the largest national park in the contiguous United States. The possibilities for discovery are endless!

These are just a few of the wonders to be found here. Some of these sites are easily accessable, but some require a four-wheel-drive vehicle or hiking.

To locate these places use your park map, study the displays in the museum, and ask the rangers at the visitor center and ranger stations for directions.

Mountain Ranges

Panamint Mountains: The highest and wettest mountain range in the park rises between Death Valley and Panamint Valley. Telescope Peak is the highest summit in the park at 11,049' elevation.

Cottonwood Mountains: Water loving cottonwood trees are the namesake for a wet canyon and this otherwise dry mountain range. Several inter-mountain basins are hidden within it. The range's highest peak is Tin Mountain at 8900' elevation.

Grapevine Mountains: Grapevine Springs, which supplies water to Scotty's Castle, also supplies the name for this range. Its west slope is deeply incised by spectacular canyons. Grapevine Peak is the highest at 8738' elevation.

Funeral Mountains: The southern section of this range provides a rugged backdrop east of the Furnace Creek area. Pyramid Peak is highest in this range at 6703' elevation.

Black Mountains: Not as high as some of the other ranges in the park, it does rise abruptly from the salt flats at Badwater. Funeral Peak tops it off at 6384' elevation.

Amazing Structures

Wildrose Charcoal Kilns: Fuel and carbon were needed to process silver ore at the Modoc Mine, so these ten beehive-shaped kilns were built in 1876.

Furnace Creek Inn: Built of adobe and native stone, this classic 1920's hotel was constructed by the Pacific Coast Borax Company.

Scotty's Castle: Death Valley Scotty claimed this elaborate Spanish-style mansion was built by gold from his ficticious mine. In reality is was a 1920's vacation home of wealthy Chicagoans, Albert & Bessie Johnson. Living history tours are presented daily

Saline Valley Salt Tram: To haul salt out of isolated Saline Valley beginning in 1913, this engineering marvel lifted buckets up 7000 feet over the Inyo Mountains, then down the other side 5000 feet.

Arches & Natural Bridges

Natural Bridge: 50 feet high and 30 feet thick, this is the largest known natural bridge in the park. It was created as undercuts in stream meanders eroded too close together and broke through. Look for remnants of the old channel high on the north side.

Little Bridge: This 20 foot high natural bridge spans only part of the canyon named after it. Hikers will also discover a small arch on the canyon wall downstream from the bridge.

Eye of the Needle: Looming above the floor of Echo Canyon, this arch is presently a pierced ridge. Will it someday become a bridge as erosion continues?

Fascinating Flora

Titus Canyon: Its deep canyon walls shelter an amazing diversity of rare plants. The rare Rocklady Maurandya and Rock Mimulus are found here.

Lee Flat Joshua Trees: An abundant stand of the tree-size yuccas grow in this mountain-rimmed valley.

Ancient Bristlecone Pines: Growing only in the highest elevations, some of the wind-sculpted trees atop Telescope Peak are 3000 years old.

Devil's Cornfield: Wind and sand have created this strange field of arrowweed hummocks.

Eureka Dunes: Isolation from other dunes and the hardships of surviving the shifting sands have led to the development of plants found nowhere else. An evening primrose, a dunegrass, and a locoweed are all endemic to these dunes

Playas & Salt Flats

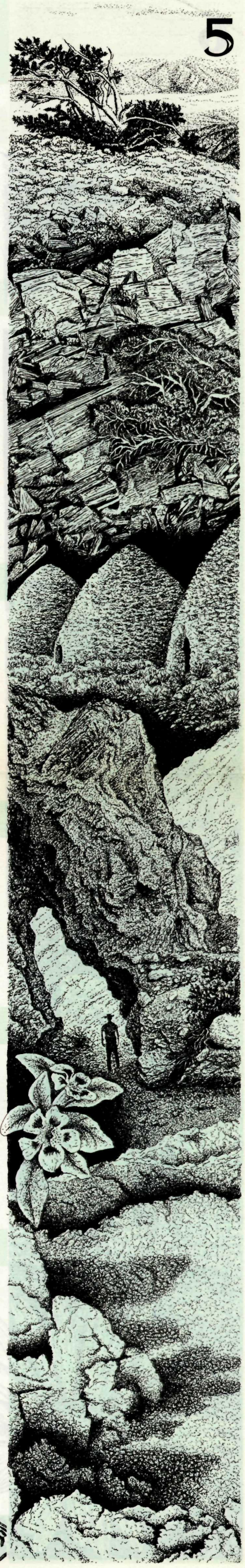
Badwater Basin: At 282 feet below sea level, this is the lowest elevation in the Western Hemisphere. This is the best place in the park to experience the surreal salt flats.

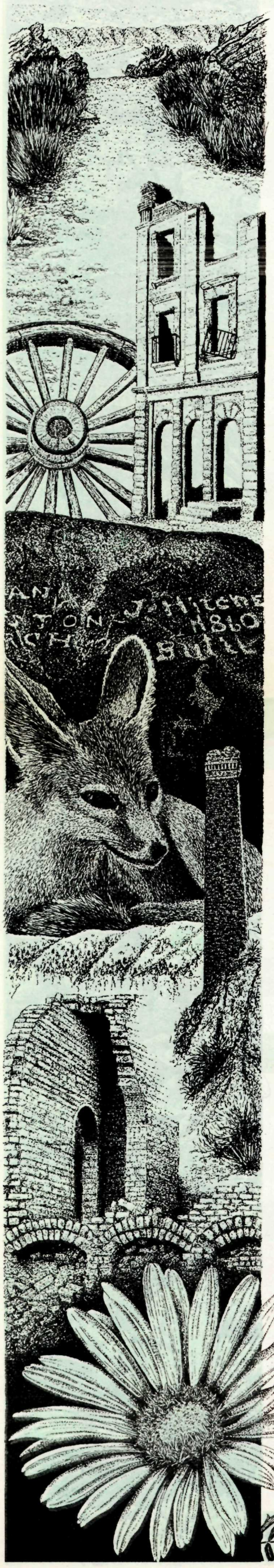
Saline Valley Salt Flat: Salt mined from the surface of this remote lakebed was hauled over the Inyo Mountains via an aerial tramway. Freshwater springs produce a life-filled marsh along one edge.

Cottonball Basin: Borax was scraped off the surface of this salt flat and hauled to nearby Harmony Borax Works for refining. Springs on the western side support a population of pupfish.

The Racetrack: Rocks slide across the rain-slicked playa surface leaving tracks for visitors to ponder. An island-like outcrop of rock known as the Grandstand rises out of the northern end of the lake bed.

Northern Panamint Valley: Highway 190 divides this playa. Lake Hill on the lake bed's northeast edge may have originated as a massive rock slump from the face of Panamint Butte towering above.





Timbisha Shoshone Tribal Homeland Established

Since time immemorial, the Timbisha Shoshone Tribe has lived in portions of California and Nevada including the area that now comprises Death Valley National Park and other areas administered by the Bureau of Land Management (BLM). Since 1936, the Tribe has lived on approximately 40 acres of land near Furnace Creek in the park. The Tribe's membership has grown, and Tribal members have a desire and need for housing, government and administrative facilities, cultural facilities, and sustainable economic development to provide decent, safe, and healthy conditions for themselves and their families. The Tribe achieved Federal recognition in 1983 but still did not have a permenant land base within the Tribe's ancestral homeland.

The Timbisha Shoshone Homeland Act was passed by Congress and signed into law by President Clinton on November 1, 2000. This act provides land held in trust on which the Timbisha Shoshone Tribe can live permanently within their ancestral homeland. The interests of both the Tribe and the National Park Service (NPS) will be enhanced by this recognition of their coexistence on the same land and by establishing partnerships for compatible land uses, and for the interpretation of the Tribe's history and culture for visitors to the park.

As legislated by this act, Tribal lands will now include 314 acres in the area surrounding and including the present Timbisha Village at Furnace Creek. Development in this area will be limited to a maximum of 50 single-family residences, a tribal community center and other community structures, a small-to-moderate inn, and a tribal museum and cultural center. Casino-style gaming development is prohibited on trust lands within the park.

Three Special Use Areas have also been designated within the park. These areas will be used for low impact, ecologically sustainable, traditional practices under agreements between the Tribe and the NPS. This will not include the taking of wildlife. Areas previously designated as wilderness will continue to be managed as such.

Adjacent to the Timbisha Village at Furnace Creek, the Mesquite Use Area will have a cooperative agreement for mesquite management using traditional techniques such as thinning, pruning, harvesting, removing excess sand, and removing exotic species. Also near the Timbisha Village is a Buffer Area of approximately 1,500 acres in which the NPS will restrict visitor use to protect the privacy of the Tribe and to provide an opportunity for the Tribe to conduct community affairs without undue disruption from the public.

The Timbisha Shoshone Natural and Cultural Preservation Area includes the Panamint Range and portions of Mesquite Flat, Eureka Valley and Saline Valley. Within this area, the Tribe may establish and maintain a tribal resource management field office near the existing ranger station at Wildrose. The Tribe also may use traditional camps at Wildrose and Hunter Mountain for traditional cultural and religious activities, which on the request of the Tribe, the minimum area shall be temporarily closed to the general public in order to protect the privacy of tribal members engaging in traditional cultural and religious activities.

Tribal lands outside the park in California that were previously administered by the BLM include approximately 1,000 acres near Death Valley Junction and an undetermined location of approximately 640 acres near Centennial Flats. In Nevada the Tribe will now have 2,800 acres at Scotty's Junction and 3000 acres at Lida, Nevada.

Wildfire in Panamint Mountains

A wildfire started near a cabin in Happy Canyon on the west side of the Panamint Mountains on July 22, 2000. Igniting in BLM land, the fire quickly spread up canyon and into the national park. Restricted primarily to upper Happy Canyon and surrounding mountain slopes, the fire did cross over the crest and into the upper reaches of Six Spring Canyon. It burnt more than 5500 acres of pinyon pine and juniper woodland between 5000 and 8000 feet elevation. One small cabin was destroyed. The fire was fully contained by July 31.

It was the second largest fire recorded in the Death Valley area, exceeded by a fire on Hunter Mountain in the late 1970s.

Firefighters had to be flown in by helicopter due to the roadless and rugged terrain. In addition, an air tanker was deployed for water drops. Minimum Impact Suppression Techniques were employed to lessen the impact of fire fighting because much of the fire was burning in wilderness.

The heat was debilitating to firefighters and has severely limited aircraft in their flight capabilities. Temperatures in the valley that week exceeded 120° F and in the mountains it was 90° F.

To protect park resources, campfires are allowed only in the firepits provided in developed campgrounds.

Rangers Receive Award

Robert Stanton, Director of the National Park Service, presented Exemplary Act Awards to 32 National Park Service employees in a ceremony at Death Valley National Park on May 1, 2000. The employees were acknowledged for their roles in a serious incident with three heavily armed individuals on March 17, 2000.

The National Park employees, working with an interagency team of ten different law enforcement agencies, brought to a conclusion a 16-hour standoff with the individuals that ended near midnight on the salt pan floor of Death Valley.

The incident began in the early morning hours when the individuals fled from a Nevada State Patrolman who had stopped them for speeding along U.S. Highway 95 near Beatty, Nevada. The individuals fled the scene, which began a high speed pursuit into Death Valley National Park. After firing upon two law enforcement vehicles, they abandoned their vehicle and fled by foot across Death Valley. The three fugitives took cover behind a rock "bunker" and periodically fired shots at law enforcement officers throughout the day, at one point hitting a California Highway Patrol helicopter and forcing it to make an emergency landing. The incident ended when the individuals were confronted and apprehended by a National Park Service Special Event Team along with Death Valley National Park Rangers and Inyo County Swat Team members who had kept the individuals contained throughout the day.

The Exemplary Act Award acknowledged the interagency teamwork and cooperation that brought to an end the 16 hour standoff with no loss of life, no serious injuries, no significant damage to park resources and no damage to nearby facilities and property at Furnace Creek. The employees were recognized for the efficient, rational and highly professional manner for which they performed when the heavily armed individuals threatened park employees, park residents and the many visitors to the park on that day.

Ordinary People, Extraordinary Place

*" **'GONE FISHIN'**, that's the sign you see in our store window in Pomona quite often. In fact fishing is how our business started. My husband Mr. Burton Frasher decided to take a vacation away from his crate making job and visit Yosemite. Noticing the wonderful picture my husband took, several people asked us for copies. Burton had so many requests he turned his photographs into postcards, selling hundreds. Frashers Fotos was born."*

This is the story you may hear from Mrs. Josephine Frasher if you visit Scotty's Castle. The year is 1939; she is visiting the castle while her husband explores Death Valley for the perfect photo. In addition to the Sierra photographs, the Frashers, who were real people, also sold postcards of Death Valley and Scotty's Castle. The park ranger who portrays Mrs. Frasher knows these details because of oral histories.

Oral histories are memories recorded or written down. In Death Valley, you find interviews from former CCC workers, miners, the Japanese who were interned here during WWII, the Panamint Shoshone Indians, and many others. These oral histories reveal what life was like in the past. They take us beyond dates and famous people, allowing us to form our own conclusions about adventuring and working in Death Valley.

Today the desert is peaceful with only the sound of the wind scouring tracks from the sands and roads, leaving no trace of the brave adventurers that explored this area. Oral histories give these adventures a voice, a story, a history. Without the connections the stories make, a castle with furniture is only just that, a field of crystallized salt is a natural wonder but tells nothing of the struggle of people who had to cross it.

Preserving Your Past

Just like Death Valley National Park, your family has a valuable history. All families, including yours, have stories complete with triumph, tragedy, and day-to-day events that may have seemed mundane at the time, but differ from life today. These family stories, when woven together with our neighbors' stories create a colorful tapestry that reflects the history of our country and the world.

If you want to save your family's tales, there are many places to get tips about how to do oral history interviews and genealogy projects. You can begin by checking with your local library and historical society. There are also helpful web sites such as My History is America's History – www.myhistory.org and the Oral History Association Homepage–http://omega.dickinson.edu/organizations/oha/

▼ **Interview older members of the family.** If you are the older person, record your memories, or enlist an interested younger person to help you.

▼ **Take time to prepare your questions.** Include the who? what? where? why? and how? of events. Ask open-ended questions such as "why did ____ happen?, or tell me about _____.

▼ **Consider the fact that technology changes**; you may want to take photographs of the person in black and white for purposes of longevity and the conversation transcribed onto paper since taperecorders and VCRs as we know them probably will not exist 100 years from now. In any case, be sure to practice with the equipment you use before the interview.

The Value of Water

Death Valley Scotty told a typically exagerated story of coming upon a man apparently lost in Death Valley and without water. The man croaked to Scotty desperately, "Water, water." Scotty pondered the situation and decided the most humane thing for him to do was shoot the man and put him out of his misery. Next to gold, Scotty knew the most valuable thing in the desert was water.

Scotty claimed to work as a swamper in Death Valley, taking the borax out of Death Valley over 160 miles to a train depot in Mojave. It was through this experience that Death Valley Scotty came to love the grand, endless beauty that is Death Valley. He also knew that the one thing you have to have to survive in the desert is water. Scotty made it a point to know where water could be found in Death Valley.

Scotty's favorite watering hole was the springs of Grapevine Canyon in the northern end of Death Valley. By 1907 Scotty began "squatting" on the land near the present Lower Vine Ranch. He even filed a homestead claim, but he didn't gain legal possession.

These particular springs have been used for centuries, most notably by the Shoshone Indians, who used the area for subsistence farming and as a wintering ground. The springs provided for a distinct environment for plants such as mesquite and wild grapes. Willow trees that grow near the springs provided for the baskets the Shoshone wove.

Over time, Euro-Americans began to explore Death Valley, and with their explorations came the discovery of valuable minerals. In Grapevine Canyon Jacob Steininger was the first to gain legal claim of the land and the associated springs by filing a desert land entry claim in 1902.

It was from Steininger that Albert M. Johnson, Scotty's benefactor, bought the land the Death Valley Ranch now stands. Johnson began buying land in 1916 after visiting with Scotty and experiencing the magnificent setting of Grapevine Canyon. The canyon was an ideal location for constructing a vacation home, because it had a constant and regular source of water. By 1937 Johnson had acquired full title to over 1500 acres in Grapevine Canyon.

Albert Johnson was formally educated at Cornell University receiving a degree in engineering. He used his ingenuity and persistence to take advantage of the natural resources available in the canyon, and overcome the challenges inherent in building in such a remote location.

Construction of Death Valley Ranch (later known as Scotty's Castle) began in 1922. Much of the technology incorporated into the building included special uses of the nearby springs. Perhaps the most significant use of the springs was using Pelton water wheels to generate electricity. The springs are located at an elevation 300 feet above the building setting, which insures ample water pressure as it comes down hill and passes through the Pelton water wheel. The turning wheel would run a generator to produce electricity. There is enough water to sustain all electrical and driving power requirements and still have enough left over for other uses.

To counteract the dessicating effects of the dry desert climate, an unusual water fountain was built within the Castle. In the Great Hall, water slowly dripped down the face of a rock wall into a catch basin to be recirculated. It provided added humidity to the interior environment and the comforting sound of water

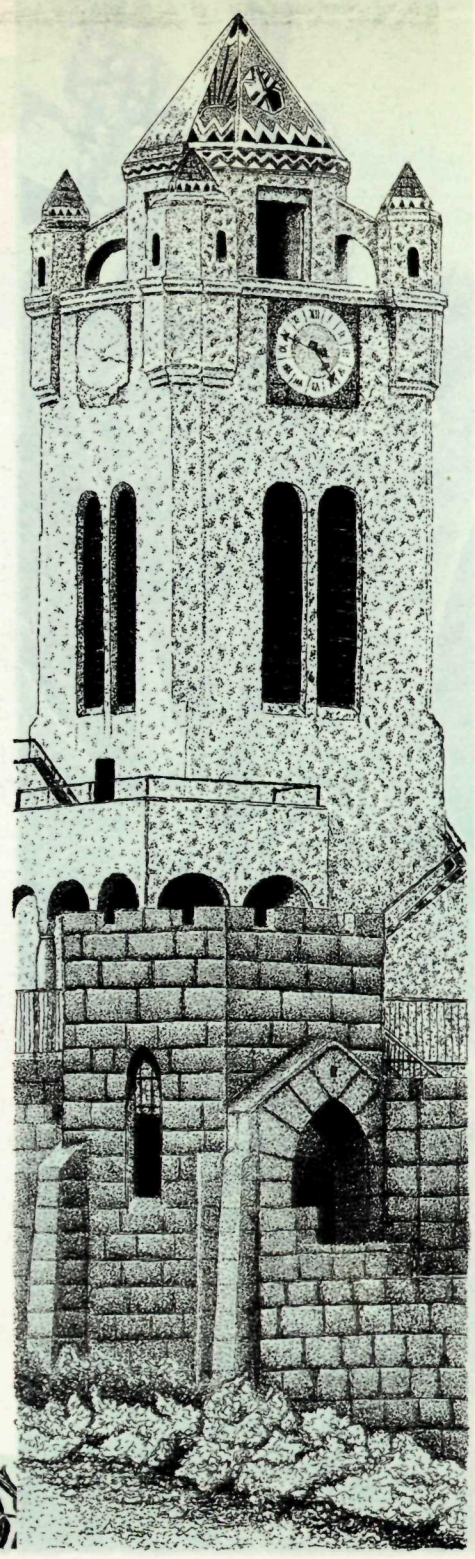
A visit to Scotty's Castle can reveal an idyllic setting filled with technological ingenuity. Albert Johnson and his best friend Death Valley Scotty found the setting in Grapevine Canyon to have that rare quality of a sense of peace with the benefit of valuable water.

New Exhibits at Scotty'sCastle

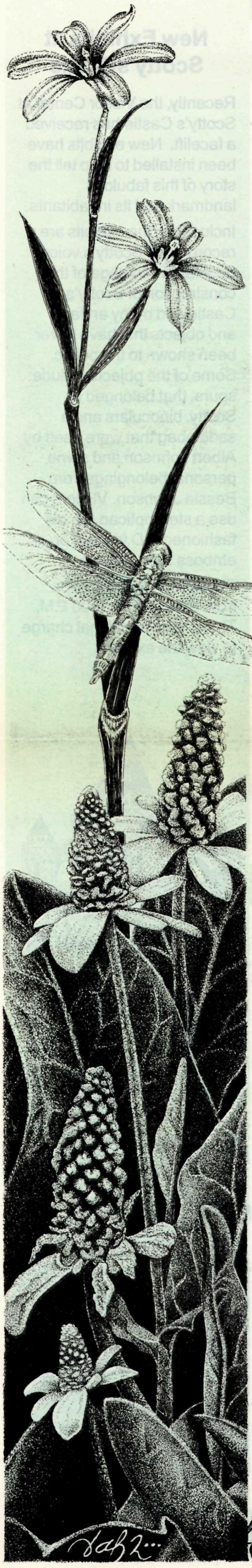
Recently, the Visitor Center at Scotty's Castle has received a facelift. New exhibits have been installed to help tell the story of this fabulous landmark and its inhabitants.

Included in the exhibits are a recording of Scotty's voice, original film footage of the construction of Scotty's Castle and many artifacts and objects that have never been shown to the public. Some of the objects include: spurs, that belonged to Scotty, binoculars and a saddlebag that were used by Albert Johnson and some personal belongings from Bessie Johnson. Visitors can use a stereoptican (an old fashioned 3-D viewer) or emboss a bookmark.

The visitor c[illegible]en from 8:45 A.M. to 5:00 P.M. There is no additional charge to view the exhibits.



8 Natural History



Evolution Islands

Wetland and riparian areas have a unique scientific value. The Death Valley/Ash Meadows area is a classic example of a plant and animal laboratory in evolution. This fact is due to the relatively recent development of the desert climate and a unique geologic history where large marshes and lakes were relatively plentiful as recently as 15,000 years ago. This combination of events has had the unusual result of confining several aquatic species that were probably widespread at the start of the last Ice Age to remnant wetlands that have persisted for thousands of years.

The presence of the unique suite of pupfish in the Death Valley region is comparable to the presence of land tortoises and Darwin's finches on the Galapagos Islands. Both animal groups originally colonized their respective areas thousands of years ago and became isolated in separate habitats that possess different environmental conditions. Through time, natural selection and isolation transformed a limited number of ancestral lines into several unique varieties. The existence of nine pupfish species and subspecies in isolated wetlands along the Amargosa River is therefore akin to the 13 finch species and 15 tortoise subspecies on the isolated islands of the Galapagos archipelago. In each case, differences in species were aided by the separation of populations that could not cross inhospitable habitats.

Extremes on the Galapagos Islands have helped to shape the physical characteristics and tolerances of the tortoises on different islands and the same general process of natural selection has affected pupfish which inhabit wetlands along the Amargosa River. The fish have, for example, developed/retained an ability to live in water that is 2.5 times more saline than seawater. With regard to temperature, some pupfish are able to live for short periods in water temperatures equal to 107° Fahrenheit. Both of these adaptations are important in a desert environment where water saltiness and temperatures are significantly greater than other areas in the United States.

Each type of pupfish has evolved to the extent that they are physically distinct and genetically different. Differences in breeding behavior have been documented for pupfish in habitats that are relatively close to one other but possess different environmental conditions. In a similar vein, genetic variation has also been found in different populations of speckled dace along the Amargosa River. This fact suggests that "each desert wetland community functions as an evolutionarily significant unit" (Sada et. al 1995).

Much of the genetic and physical variability in the pupfish has been attributed to different environmental conditions that exist in different wetlands (e.g. warm spring orifices vs. cool spring outflows, high salinity vs. low salinity areas) and differences in population size which are influenced by habitat size (small springs vs. large springs). This relationship suggests that pupfish evolution is highly dependent on the maintenance of natural habitats, and that human modifications to environments will alter the course of natural selection.

Regional loss and degradation of wetland and riparian resources increases the value of pristine habitats inside Death Valley National Park. California has lost a greater percentage of its wetland acreage than any other state with 91% of the original habitats being drained, filled, or manipulated. Nevada has lost 52% of its original wetlands, and only 0.3% of the state acreage is now classified as a wetland. Loss of riparian habitats in California, Arizona and New Mexico has been so extensive that they have been considered to be endangered ecosystems.

The unique plants and animals that exist within the biological laboratory of Death Valley National Park offer significant scientific opportunities. At some future time, these species may hold the key to understanding how fast evolution takes place, as well as how plants and animals adapt physically and behaviorally to their immediate surroundings.

Curse of the Tamarisk

*"**This stream** of warm water, flowing down from a gully that headed up in the Funeral Mountains, had a disagreeable taste, somewhat acrid and soapy. A green thicket of brush was indeed welcome to the eye. It consisted of a rank, coarse kind of grass, and arrow-weed, mesquite, and tamarack (sic). The last-named bore a pink, fuzzy blossom not unlike pussy-willow, which was quite fragrant."*

Zane Grey, describing Furnace Creek Wash on a March 1919 visit to Death Valley.

Native to the Eastern Hemisphere, the tamarisk family of plants includes more than 50 species. They inhabit areas ranging from Spain, through northern Africa, to Asia. Several species of tamarisk were brought to the United States beginning in the early 1800s for ornamental plantings, erosion control, shade, and windbreaks. By 1913 it had invaded the California desert. In Death Valley, tamarisk was planted by pioneers, the CCC, and even by the National Park Service during its early tenure of this park. Today, tamarisk is one of the most abundant riparian plants throughout the arid southwest.

Unfortunately, tamarisk's curse was not recognized soon enough. In the west, where ever tamarisk gains a foothold, it crowds out native plant and animal communities. It consumes excessive amounts of water, the key to life in the desert, and salinizes soils where its salty leaves drop.

Two types of tamarisk threaten Death Valley's precious, native wetlands; **saltcedar** (Tamarix ramosissima) which are deciduous shrubs, and **athel** (Tamarix aphylla), an evergreen tree species. Both have scaly branches that resemble conifers; hence, the name saltcedar. Only the saltcedar has feathery pink flowers that produce a mind-boggling number of seeds. These small, fluffy seeds can float on the wind which allows them to sprout at surrounding water sources. The athel's seeds do not germinate and are not as invasive.

The National Park Service began a tamarisk removal project at Saratoga Spring in 1972 to return the area to a more natural condition. More recent removal projects have been at Eagle Borax Works, Warm Springs Canyon, the sand dunes near Stovepipe Wells, and other sites.

The ongoing habitat restoration project in Furnace Creek Wash (along Highway 190 east of the Furnace Creek Inn) began in 1999. The National Park Service is removing a large stand of athels , as well as date and fan palms. While not as insidious as tamarisk, the non-native palms also have adverse affects on native populations.

After these exotic species are removed, native plants will be able to re-establish themselves. To enhance the recovering plant community's diversity, native plant seeds will be collected from the area and grown in a nursery to be outplanted.

Death Valley and other national park areas protect native ecosystems and processes. The Furnace Creek Wash project is an example of how we are attempting to reverse past actions that could destroy resources the parks were created to preserve.

Water in a Dry Land

Fossil Water's Long Journey

Where does our drinking water come from? Sources of freshwater such as streams, springs and wells, originate from precipitation, rain or snow. Nothing else. In arid regions where there are few streams or rivers, much of our water must be derived as groundwater from springs or wells. Amazing as it may seem, a surprising quantity of water flows into the Death Valley via springs fueling diverse plant and animal communities. Many small springs throughout the mountains surrounding Death Valley derive their water from rain or snow falling at higher elevations. Large springs near Furnace Creek and Scotty's Castle supply drinking water to those areas. Indeed, humans have used these springs for thousands of years! Yet flow from these springs far exceeds that which could originate from local precipitation. In order to find the life-giving rain and snow supplying water to eastern Death Valley, we must make a long journey in both space and time.

Water flows downhill. Knowing this and the fact that water can only come from rain or snow we can begin to trace the origins of our water. The Death Valley Flow System, as our regional groundwater system is called, involves an area covering the southern half of Nevada. Moving slowly through a complicated network of cracks and pores in the rock, groundwater winds its way from areas at 5000 to 10,000 feet above sea level--areas that receive the most precipitation--down hill where it exits the ground at large regional springs in Ash Meadows and Death Valley. This is a slow process and by some estimates tap water in Furnace Creek may have been traveling underground for several thousand years or more!

To understand this system, one must first look at the geologic history of Nevada. Water collected in the mountains and high plateaus of central and eastern Nevada percolates down through porous rock and gravels until it reaches an impermeable layer of rock. Water then must move along this layer, always in a downhill direction, generally through thick layers of limestones and dolomites. These water-laden semi-permeable rocks are referred to as an *aquifer*. This limestone was formed during the Paleozoic Era, 400-600 million years ago, in shallow warm seas much like today's Caribbean. Subsequently, the area was uplifted during the Antler period of mountain building (360 million years ago) and then severely stretched over the last 20 million years. The latter has resulted in the familiar narrow north-trending mountain ranges separated by intervening valleys, the Basin and Range topography typical of much of Nevada. Paleozoic limestones in Central and Southern Nevada are quite permeable, having been extensively fractured and folded during their tumultuous history. As a result, they can store and serve as a conduit for large amounts of underground water.

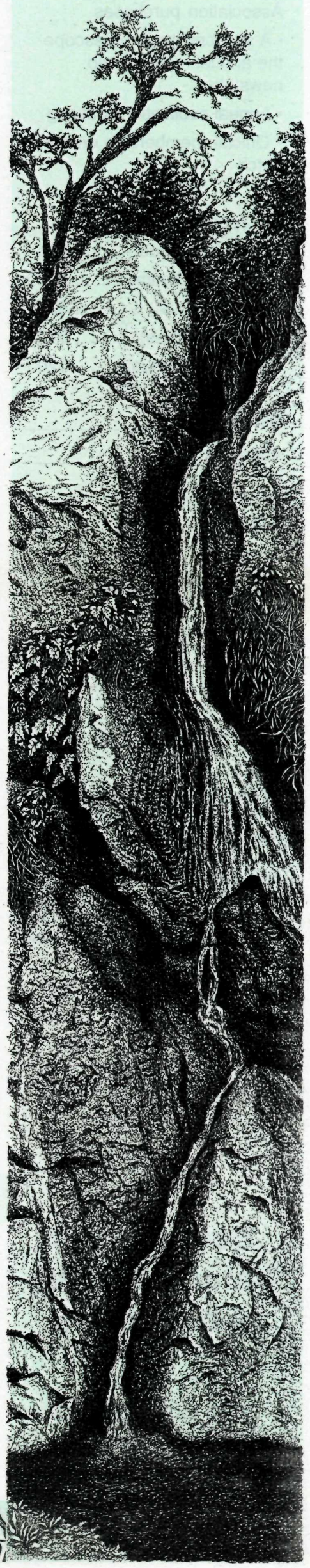
While a deep limestone aquifer accounts for most of the water flowing from major springs along eastern Death Valley, the regional flow system also contains shallow aquifers: the basins between the mountain ranges. Precipitation collected in a particular area, usually a mountain range, can flow into shallow local basins from which it can continue to descend towards the deep (several thousand feet) aquifer. Wells drilled into shallow sands and gravels in a valley will intersect water derived from relatively local sources. Deep wells into the underlying limestone will generally tap water from more remote sources.

Large springs along the eastern side of Death Valley National Park tap the deeper of these systems. This water has traveled upwards of several hundred miles and can be quite old as a result. It is often referred to as *fossil water*, water that fell to the earth up to 10,000 years ago. (Water issuing from springs in the Saharan Desert of North Africa may be up to 40,000 years old!!). Given the long transit time, this fossil water is highly mineralized but still usable by humans and other living things. It is also quite warm, up to 95 °F (35 °C) as a result of having traveled through areas of extremely thin crust and volcanic activity. As water emerges at the surface, it releases carbon dioxide due to the release in pressure and as a result deposits flow rock, usually travertine, around the spring. Travertine mounds characterize many of the springs tapping the deep limestone aquifer.

Because our water is so "old" the amount flowing into Death Valley today may reflect a wetter climate several thousand years ago. Less precipitation in Central Nevada means the large limestone aquifers are not being replenished to the level they were 5000 years ago. We may already be seeing the effects of this at Devil's Hole, a submerged limestone cavern near Ash Meadows National Wildlife Refuge. The water level in Devil's Hole may be viewed as a window to the water table. The water level fluctuates seasonally reflecting local recharge (additions to the aquifer from the local mountain ranges), yet the overall trend is downwards. Local pumping in the late 1960's significantly lowered the water level in "the Hole." A 1972 U.S. Supreme Court order mandated a minimum water level to protect the endangered Devil's Hole pupfish. Water levels, having since recovered to a lower level, now indicate a gradual decrease.

The question for farmers, land managers, and planners is "What is the cause of this trend?". Is it due to climatic drying or incremental increases in pumping "upstream" from Devil's Hole? Or both?

The health of a desert ecosystem like that of Death Valley National Park is ultimately dependent on the viability of its water resources, namely springs and areas where groundwater is accessible by plant roots. Groundwater is limited and even slight decreases in the water table can result in the disappearance of springs and high stresses for the communities of plants and animals dependent on them. Increasing water withdrawal from Central and Southern Nevada aquifers will eventually manifest itself in decreased flow to Death Valley. In order to protect its water resources, Death Valley National Park in cooperation with the United States Geological Survey, Nye County, Nevada, and Inyo County, California monitors and characterizes water resources in Death Valley and continues to study the nature of the Death Valley Flow System. It is indeed an intriguing set of circumstances that brings water to this thirstiest of places without which Death Valley would be a far different (and less hospitable) place.



Save the Devils Hole Pupfish!

A detached unit of Death Valley National Park, Devil's Hole was set aside to protect the endangered Devils Hole pupfish (Cyprinodon diabolis). Despite a U.S. Surpeme Court ruling and federal designation as an Endangered Species, the Devils Hole pupfish are still struggling for survival. Many factors, including water level, water temperature, oxygen levels, pollution and global warming may be influencing the declining numbers of pupfish. The spring's water level has continued to slowly drop and it is predicted that by the year 2020 it may fall below the necessary court-mandated level. **Pumping of ground water** to support regional development within the entirety of the Death Valley watershed will likely have both immediate and long-term impacts on the resources within the park boundaries. A 2.5-centimeter fish may well be our "canary in a coal mine" for many of the plants and animals that have adapted to the environment of Death Valley. Its fate may also reflect on what is in store for humans in the future.

BOOKSTORE

Death Valley Natural History Association Membership Application

Your membershipentitles you to the following:

- 15% discount on all Association purchases
- A subscription to Telescope the annual membership newsletter
- Annual publications catalog
- Official membership emblem patch

Types of Membership:

Individual (Annual) $15
Individual (Lifetime)..... $100
Family (Annual) $25
Family (Lifetime)..... $125
Corporate (Annual)..... $200

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State _____ Zip _____

Mastercard ☐ VISA ☐

Acct.# _____

Exp. date _____

Signature

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All dues and contributions are tax deductible to the extent they exceed benefits.

Please include payment with application either by credit card or by check made payable to **Death Valley Natural History Association**.

Death Valley Natural History Association

P.O. Box 188
Death Valley, CA 92328
760-786-3285
devahstry@aol.com

Selected Trip Planning Publications

The Death Valley Natural History Association is a non-profit organization dedicated to providing visitors to Death Valley National Park and Mojave National Preserve with a quality educational experience. On this page you will find suggested offerings from our publications, chosen to help you plan your visit and make the most of the time you spend in Death Valley and Mojave

Out & About

A Traveler's Guide to Death Valley National Park (Lawson) Beautiful color photographs, informative text and maps organized into chapters describing areas of the park to visit in one day. 42 pages. $7.95

Adventuring in the California Desert: The Sierra Club Travel Guide to the Great Basin, Mojave and Colorado Desert Regions of California (Foster) Included outdoor recreational opportunities, detailed descriptions of each region's natural, geologic and human history along with plant and animal identification, safety tips, area maps and tour suggestions. 496 pages. $16.00

Hiking Death Valley: A Guide to its Natural Wonders and Mining Past (Digonnet) A comprehensive guidebook providing 280 hiking/driving destinations ranging from easy day hikes to multiple-day treks. Includes topographic maps, distance and elevation tables, road logs and descriptions and detailed history of over 60 mines, ghost towns and other historic sites. 542 pages. $17.95

The Explorer's Guide to Death Valley National Park (Bryan & Tucker-Bryan) A complete guidebook to Death Valley's backcountry roads, containing geologic and human history, road logsn short walks, day hikes and backpacking trips. 382 pages. $22.50

Natural History

Desert Critters: Plants & Animals of the Southwest (Miller & Nelson) Colorful illustrations and hand-lettering highlight this pocket-book featuring plants and animals of the southwest. 64 pages $5.95

Geology Underfoot in Death Valley and Owens Valley (Sharp & Glazner) Geological stories of thirty-one sites in Death Valley and Owens Valley for everyone interested in how the earth works. 320 pages. $16.00

Lizard Watching Guide (Sanborn) Easy to use guide detailing common lizards found in the Mojave and Colorado deserts. Including locations and descriptions for observing lizards and their adaptations to their desert environments. 36 pages. $5.95

Poisonous Dwellers of the Desert: Description, Habitat, Prevention, Treatment (Southwest Parks & Monuments Association) A guide to help identify as well as appreciate potentially dangerous desert creatures. Black & white illustrations. 32 pages. $5.95

Wildflowers of Death Valley National Park and the Mojave Desert (Death Valley Natural History Association) A fold-out pocket guide containing 60 stunning images in full color contributed by photographer Bill Ratcliffe. $1.00

Cultural History

Death Valley & The Amargosa: A Land of Illusion (Lingenfelter) a history of the Amargosa basin spanning the century leading up to the naming of Death Valley as a national monument in 1933. The story of an illusory land, the people it attracted and the dreams they pursued. 664 pages. $22.50

Death Valley in 1849 (Southworth) An interesting and informative unraveling of some of the mysteries of the legendary Death Valley '49ers. Carefully researched, factually reported, vivid and entertaining. 154 pages. $8.00

Death Valley Scotty: The Man and the Myth (Johnston) The most famous prospector the world has ever known, Death Valley Scotty (Walter E. Scott) was one of the area's most intriguing mysteries. Historic photographs and informative text trace Scotty's life and escapades. 48 pages. $6.95

Scotty's Castle (Shally & Bolton) Facinating story behind the design and construction of Scotty's Castle. Detailed black & white photographs of exterior and interior construction. 40 pages. $5.95

Walking Tour of Scotty's Castle Booklet designed to guide you as you leisurely tour the grounds of Scotty's fabulous showplace. Contains period photos, text and drawings. 17 pages. $2.00

General

Death Valley National Park (Fred & Randi Hirschmann) 106 beautiful color images offer glimpses of Death Valley's treasures, from deep shadowed canyons to shifting sand dunes, from salt pans on the valley floor to ancient mountain pines. 96 pages. $18.95

Death Valley National Park: An Interpretive History (Cornett) Interpretive text accompanies full-color photographs of Death Valley's fascinating scenery. 48 pages. $5.95

Death Valley Postcard Book (Sierra Press) Contains 15 beautiful postcards of Death Valley. $3.95

Kid's Stuff

Death Valley Discovery Activity Book Children discover the wonders of Death Valley through word games, puzzles, drawings and other games. Death Valley Discovery engages young minds through creative activity. 32 pages. &1.95

Desert Discoveries (Wadsworth) Colorful watercolors and simple, informative text introduce young children to many desert dwellers, including the desert tortoise, tarantulas, scorpions, coyotes, roadrunners and more. 34 pages. $6.95

Maps & Video

Video: **Death Valley: Life Against the Land** (Finley-Holiday Film Corp.) An award -winning video featuring Death Valley's scenic wonders, unique geology, pioneer history and Scotty's Castle. VHS/PAL. 40 minutes. $19.95

Video: **Ends of the Earth: Death Valley** (Arc Media Group) This video, narrated by Peter Coyote, explores the geological facets of Death Valley. Contains interviews, on site, with leading geologists, and explores natural history of the area. 52 minutes. $20.00

Video: **Scotty's Castle** (Creative Vision) Explore the restricted subterranean recesses of the Castle, and experience the life of a man whose exploits and imagination match the grandeur of Death Valley. 30 minutes. $19.95

Map: **Death Valley National Park** (Automobile Club of Southern California) A detailed map including points of interest, lodging and restaurants, campgrounds, supplies and services with descriptions. $3.95

Map: **Death Valley National Park: California/Nevada** (Trails Illustrated-National Geographic Maps) Waterproof, tearproof, 100% plastic topographic map. Included backcountry road descriptions, trails/routes, and safety tips. $8.00

Map: **Recreation Map of Death Valley National Park** (Harrison) Shaded relief map includes campgrounds, RV camps, interpretive trails and historical landmarks. $8.95

Ordering information

Telephone orders are encouraged to insure that your needs are best suited. Phone us at 760-786-3285. Visa and Mastercard are accepted. U.S. funds only, please. Allow 2 weeks for delivery. Prices subject to change. Makes check payable to Death Valley Natural History Association.

Postage & handling rates:

$1-$10=$2.50	$26-$50=$5.50
$11-$25=$4.00	over $50=$6.50

Furnace Creek Visitor Center

(760) 786-2331

The Visitor Center is operated by the National Park Service. Open 8AM-6PM
The bookstore is operated by the Death Valley Natural History Association.

Orientation Programs
Evening Programs
Bookstore
Information
Museum

Visit our Website at:
www.nps.gov/deva

Furnace Creek Inn & Ranch

(760) 786-2345

Furnace Creek Inn & Ranch is privately owned and managed by AMFAC Parks & Resorts.

Motel
Restaurants and Bars
General Store
ATM
Gift Shops
Swimming Pools
Auto Repair & Towing
Gas/Propane Station 7AM-7PM
Showers
Laundromat
Post Office
Paved Airstrip
Borax Museum
Horseback and Carriage Rides
Golf Course
Tennis Courts

Scotty's Castle

(760) 786-2392

Scotty's Castle is operated by the National Park Service. Living History tours are offered by park rangers.
The concession is operated and managed by AMFAC Parks & Resorts. Grounds open 7:30AM-6PM

Tour fees for Scotty's Castle:

Adults	$8.00
Age 62 or over	$6.00
Adults with a disability	$4.00
Children (6-15 years)	$4.00
Children under 5	free
Children with a disability	$2.00

Daily Tours of Castle 9AM - 5PM
Self-guided Walking Trails
Museum
Bookstore
Gift Shop and Snack Bar
Gas Station 9AM - 5:30PM

Stovepipe Wells

(760) 786-2387

Stovepipe Wells Village is a park concession, operated and managed by AMFAC Parks & Resorts.

Motel
Restaurant & Bar
RV Hook-ups
Gas Station 7AM - 9PM
Convenience Store
Gift Shop
ATM
Swimming Pool
Showers
Unpaved Airstrip

Panamint Springs

(775) 482-7680

Panamint Springs Resort is privately owned and operated.

Motel
Restaurant
Campground & RV Park
Showers

Discover the California Desert

Visit the California Desert Website at **www.californiadesert.gov**

Presented by the Desert Managers Group, an interagency collaboration.

DESERT MANAGERS GROUP

Worship Services

Interdenominational Christian Worship on Sundays at 9:00 AM and 6:00 PM at the Furnace Creek and Stovepipe Wells Auditoriums.

Kids!

you can become a

Junior Ranger

in Death Valley National Park.

Ask at the Visitor Center, Scotty's Castle, or any ranger station for details.

Auto Repair

California: Baker, Bishop, Lone Pine, Ridgecrest

Nevada: Beatty, Pahrump, Tonopah

Medical Emergencies

Dial 911 from any telephone.
Ambulance and helicopter services with life support systems provide emergency transportation to medical centers.

Beatty Clinic Beatty, NV
(775) 553-2208

Pahrump Urgent Care Facility Pahrump, NV
(775) 727-6060

Death Valley Health Center
Shoshone, CA (760) 852-4383

Southern Inyo County Hospital Lone Pine, CA
(760) 876-5501

Nye County Medical Center
Tonopah, NV (775) 482-6233

Death Valley National Park

Survive the drive

▼ **The number one cause of death** in Death Valley is single-car accidents.

▼ **Follow the speed limit** to help you negotiate the narrow roads, sharp curves and unexpected dips on Death Valley roads.

▼ **Avoid speeding out of control** on steep downhill grades by shifting to a lower gear and gently tapping on the brakes.

▼ **Unpaved roads are subject to washouts.** Check for conditions before traveling these routes.

▼ **Don't block traffic.** Pull off the pavement if you want to stop to enjoy the scenery.

▼ **Be alert** for wildlife on the road.

▼ **Wear a seatbelt** and make sure it is adjusted to fit snugly.

UserFee

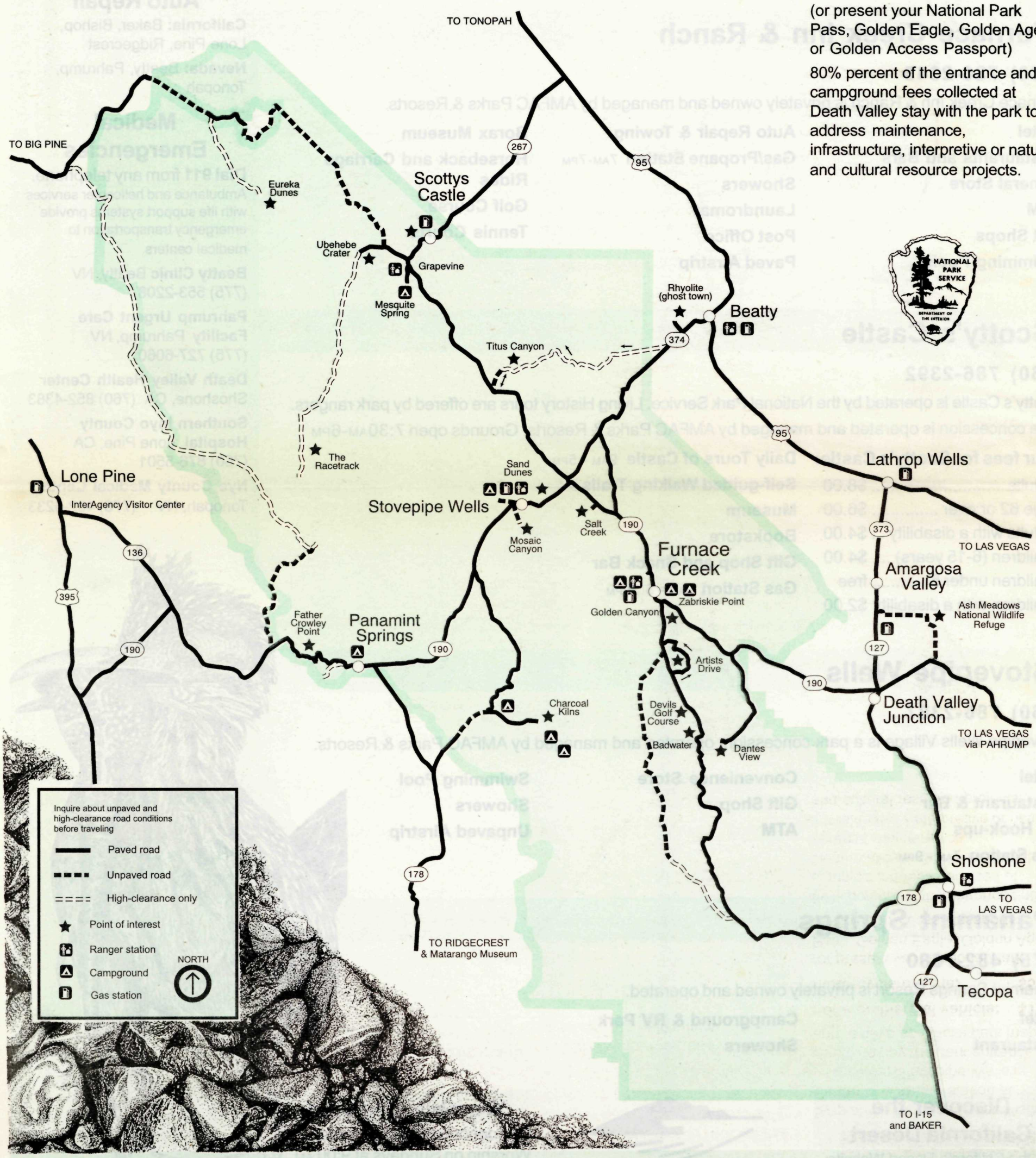
Stop at the Furnace Creek Visitor Center or a ranger station at Grapevine, Stovepipe Wells or Beatty to pay the park entrance fee and recieve an official park map.

non-commercial vehicle: $10

motorcycle/bicycle: $5

(or present your National Park Pass, Golden Eagle, Golden Age or Golden Access Passport)

80% percent of the entrance and campground fees collected at Death Valley stay with the park to address maintenance, infrastructure, interpretive or natural and cultural resource projects.



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