



Variety and Adventure in the
CALIFORNIA DESERT

A GUIDE TO RESPONSIBLE RECREATION



National Parks Conservation Association®
Protecting Parks for Future Generations®

TABLE OF CONTENTS

INTRODUCTION	1
LAND MANAGEMENT AGENCIES	2
ACCESS AND FACILITIES	3
LEAVE NO TRACE (LNT) AND TREAD LIGHTLY	5
RECREATIONAL PURSUITS	6
CHALLENGES	44
CONCLUSIONS	45
BOOKS AND ONLINE RECREATIONAL RESOURCES	46



http://www.npca.org/desert_recreation

Variety and Adventure in the CALIFORNIA DESERT

FOR ADDITIONAL COPIES OF THE MAP
THAT ACCOMPANIES THIS REPORT, PLEASE
VISIT THE WEBSITE ABOVE.



INTRODUCTION

OVERVIEW

When European Americans first explored the arid lands that stretch between what is now Nevada and California, they couldn't have envisioned that in just 450 years more than 20 million people would live and play in these starkly beautiful areas. Nor could they have foreseen the number of ways 21st-century Americans would find to enjoy and explore these lands.

More than three decades ago, the public recognized that these harsh yet fragile lands could be overwhelmed by development, people, and their pursuits if something were not done to set aside a portion of the lands for future generations to enjoy.

In 1994, Congress passed the California Desert Protection Act, landmark legislation that reorganized the stewardship of about 9.3 million acres of federally owned land, expanding the role of public land agencies in managing these lands and promoting opportunities for recreation.

The law expanded Joshua Tree and Death Valley National Monuments and redesignated them as national parks. It established Mojave National Preserve as a unit of the National Park System. In addition to increasing the Park Service's jurisdiction, the act also realigned the relationships among a number of federal land-management agencies that oversee lands in this area, including the Bureau of Land Management, the Bureau of Reclamation, and the U.S. Fish and Wildlife Service. In addition to these federal agencies, several state agencies, including California State Parks and California Department of Fish and Game, also

became more actively involved. Each agency has its own mission and its own method for handling the recreational pursuits enjoyed by thousands of people.

Although the mission of the National Park Service is more focused on preservation than on recreation, millions of acres of land remain open for residents to enjoy their favorite outdoor activity, whether it's horseback riding, orienteering, or birdwatching. Rather than "locking up" these lands, as some feared, the California Desert Protection Act recognized the need for a comprehensive approach that would preserve this extraordinary area and the recreational opportunities available here. In fact, many of the communities that surround these areas have benefited from this increased activity. Each year, millions of local, national, and international visitors venture into the desert, a region that had previously drawn only the most hardy desert rats. In 2003, visitors to Joshua Tree and Death Valley National Parks and Mojave National Preserve spent \$94.8 million, according to *State of the Parks: The California Desert Parks*, prepared and released by the National Parks Conservation Association in 2005.

Although the benefits to the region are enormous, challenges remain. One of the most significant ones is funding: federal and state funding sources have not kept pace with increasing demands, and the desert national parks have too few law enforcement and interpretive rangers. As a result, visitors engaged in recreational pursuits may lack the assurance that their camping, hiking, or four-wheel-drive adventures can be safely pursued; illegal activity or user conflicts may persist for long periods without detection; and a loss of education opportunities — the surest and most lasting way to achieve resource protection — may lead to more visitor carelessness and costly restoration efforts that could have been prevented.



ABOVE

Mojave River above ground in Afton Canyon

PHOTO BY D. A. DEMEO

FACING PAGE

Black Mountains in Death Valley National Park

PHOTO BY HOWARD GROSS

COVER

Aguille de Joshua Tree climbing route

PHOTO © SAM ROBERTS



Land Management Agencies

The agencies that manage most desert public lands are the National Park Service, the Bureau of Land Management, California State Parks, U.S. Fish and Wildlife Service, and California Department of Fish and Game.

NATIONAL PARK SERVICE (NPS) — The California desert contains the largest amount of national park land in the lower 48 states. Because the Park Service is charged with preserving natural settings in an unimpaired state for future generations, NPS limits motorized recreation and commercial events, which are allowed on other public lands.

BUREAU OF LAND MANAGEMENT (BLM) — The most diverse range of recreational pursuits can be found in the BLM's California Desert District. The BLM also manages Areas of Critical Environmental Concern (ACEC) and Wilderness Areas, which limit certain uses to allow preservation or restoration.

NPS and BLM recreation policies complement one another, allowing each agency to fulfill its mission, while meeting the public's varying recreational pursuits. For example, Death Valley National Park's Racetrack Playa (dry lake bed) is left undisturbed so visitors can contemplate the mystery of the "moving rocks" whereas the dry lakebed at BLM's Ivanpah Lake is used for landsailing.

CALIFORNIA STATE PARKS (CPS) — Anza-Borrego State Park and the Salton Sea State Recreation Area are two large state facilities among many. CPS follows a plan called the "California Recreation Policy" to optimize opportunities at parks and recreation areas, while deploying comprehensive conservation measures at the units of the state reserve system.

U.S. FISH AND WILDLIFE SERVICE (USFWS) AND CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG) — These agencies oversee fishing and hunting regulations. In addition to managing their own facilities, they also work cooperatively in park and wildlife areas not directly under their jurisdiction. For example, CDFG issues hunting permits for the Old Dad Mountains and Kelso Peak State Wildlife Areas within the Mojave National Preserve, a Park Service unit.

This guidebook — prepared by the National Parks Conservation Association — offers a look at how the residents and visitors to the California Desert are using these lands more than a decade after the passage of the California Desert Protection Act. The guidebook is intended to highlight some of the activities visitors can enjoy in the desert, offer suggestions on how people can pursue recreation responsibly, and identify some challenges for the future.

RECREATIONAL OPTIONS IN THE DESERT

Although visions of endless, undulating sand dunes may be the first image that comes to mind when you think of the desert, these lands are actually quite varied. This guide focuses on three different deserts — the Colorado, Mojave, and Great Basin. Although they all lack abundant surface water, the region is bounded by the Colorado River, and includes the Salton Sea, the Amargosa River, and the Mojave River. In addition, riparian habitats, palm oases, and natural springs occur along major earthquake faults and other locations. Seasonal rains and thunderstorms yield temporary creeks, shallow lakes, and waterfalls, which join human-made bodies of water to set the stage for some of the best bird watching in southern California. These conditions make for boating, fishing, and hunting opportunities that the average person might not expect to see in the desert.

The elevation range is dramatic and contributes to a diverse collection of animals and ecosystems. From the lower points in Death Valley and Imperial Valley to the mountain ranges that reach 7,929 feet (Clark Mountain) in Mojave National Preserve, and 11,049 feet (Telescope Peak) in Death Valley National Park, the topography offers much more than can be seen from the highway.



LEFT

Joshua Tree village tourism

PHOTO BY D. A. DEMEO

ACCESS AND FACILITIES

The California Desert includes some of the most accessible places to visit in the West. Though the public lands encompass large areas, a network of paved and dirt roads encourages exploration. Once the car is parked, a vast system of marked and unmarked trails invite visitors to burn a few calories, encounter little-known scenic vistas, and enjoy wildlife such as the resident coyotes.

AUTO TOURING

Auto touring is something just about anyone can enjoy in the desert. Even if you have no plans to tour the open road, you'll probably do some driving to get to your intended destination. The national parks and highways with special designations, such as Route 66 — a National Historic Corridor managed by the Park Service — and BLM's Back Country Byway Program, are just a few of the options available. Route 66 passes through the Mojave Desert from Needles to San Bernardino and offers a chance to re-create a sense of the open road of the 1940s.

A driving excursion in the desert has special challenges, so plan accordingly. Long, uninhabited sections of road offer no support services and mobile service can be spotty. Flash flooding during the rainy season can also present some challenges, even to four-wheel-drive vehicles.

These desert mountain ranges offer superior hiking, backpacking, wildlife viewing, and camping, even during the hotter summer months.

Volcanic domes, cinder cones, and lava flows are just a few of the formations that can be enjoyed from the ground or from the air. Flying over the desert also reveals the dramatic geologic forces that created Red Rock Canyon, Afton Canyon (also called the "Little Grand Canyon"), and Ubehebe Crater.

Whether you experience these lands from a hiking trail, on horseback, or from the air, the desert is an extraordinary and diverse region to explore. We hope that the desert offers you new places to enjoy your favorite activity or intrigues you enough to explore a new pursuit. This guide is intended to educate and to entice. But remember, human activity and overuse can interfere with the desert's sustainability. Desert public land managers have created different levels of access, allowing motorized use in many areas while reserving some areas for non-motorized use,

and as habitat for the diverse and often endangered wildlife and flora that can be found here.

GIS MAP OF DESERT REGION (SEE ATTACHMENT)

The California Desert is a vast area often delineated by the major arteries, county boundaries, and larger towns illustrated on the California Desert Recreation Map included with this report. These sites and others are listed alphabetically in the accompanying facility matrix, which includes a descriptive web site and the most popular activities.

For more detail and driving directions, refer to the series of Tom Harrison Recreation Maps for the three national park areas and the San Diego Backcountry (Anza Borrego State Park Area). These waterproof maps are designed to highlight recreational facilities and four-wheel-drive (4WD) routes. Additional maps and recreational detail on wilderness areas can be obtained from the California Wilderness Coalition's 2006 report *Guide to the Wild Mojave*.



ABOVE
Roadway rainbow near Shoshone, CA
AP PHOTO/PHOTO BY REED SAXON

Temperatures can vacillate between unbearable heat and bitter cold, and overexposure from the sun can be fatal. Before you leave, let someone know where you're going and how long you plan to be gone. Pack a variety of protective clothing, use sunscreen, and travel with at least two gallons of water per person. Be sure to have emergency supplies that would allow you to survive for several days without help. Bring maps and periodically make note of the mileage on the odometer. It's easy to lose your bearings on a back road and mistake the way out. Consult the guide books listed in the appendix and consider taking a class on orienteering, desert safety, and survival.

Recreational vehicles (RVs) offer one of the most popular ways to enjoy a road trip, and the desert has many sites that can accommodate these temporary homes. The BLM and California State sites conveniently allow RVs to be camped next to dry lakebeds, the Colorado River, the Salton Sea, and in other recreation areas. But come prepared: Dump sites and electrical hookups are limited, and many of the sites are undeveloped (no picnic tables, fire pits, trash containers, pit toilets, etc.).

TENTING

As nice as an RV is, it doesn't offer the magic of sleeping under the stars. It also isn't an option if you're exploring 4WD routes or hiking the backcountry. You'll find that on those routes, tent sites are abundant. As an added precaution, don't put up a tent in a soft, sandy wash (intermittent streambed) during July, August, and September, when thunderstorms may bring unexpected flooding.

If you're camping and plan to enjoy an evening campfire beneath the starry, desert sky, be sure to follow the rules. On BLM lands, a campfire permit is required at all times and can be obtained for free at a visitor center. Open fires and the collection of downed or dead wood are allowed in BLM areas, whether in campfire rings or on metal pans. Campfires are not permitted in National Wildlife Refuges. In California State Parks, Death Valley, and Joshua Tree National Parks, campfires are only allowed in designated fire rings with imported firewood. Open fires are allowed in the Mojave National Preserve and California State Vehicle Recreation Areas with fire rings or pans, but collecting wood is not permitted.

Campers should also bring ample supplies of water and be prepared for a variety of conditions. For more details on public campgrounds, visitors are encouraged to consult with the agencies listed in the resources section of this guide. The desert also includes many private campgrounds, which have their own rules and regulations.

HOTELS

As you might guess, the more remote recreation areas offer few hotels. Death Valley National Park is the only one that provides lodging within its borders. The park has hotel rooms in four locations, managed by the concessionaire Xanterra and by the Panamint Springs Resort. For most other large parks, hotels and motels are located just outside the boundaries, near the main entrance.

Books and Online Resources for Access and Facilities can be found at http://www.npca.org/desert_recreation/activities.asp and on page 46 of this report.

RIGHT

Rare "lakeside" picnic in Death Valley National Park

PHOTO BY HOWARD GROSS



RECREATIONAL PURSUITS

The best way to experience the desert, of course, is to get out of the car and participate in any number of activities that are outlined on these pages. Whether you're on the ground, in the air, or on the seat of a bicycle, the desert offers a variety of ways to admire the dunes, geology, and ancient cultures that thrived here years ago.

The following pages include descriptions of several different types of outdoor recreation. Our general definition of a healthy outdoor activity is one that can be enjoyed by a variety of people in a manner that is respectful of others. So, certain extreme sports, activities that inherently damage natural and cultural resources, and activities that are not permitted on public lands are excluded. Further, the definition is limited to recreation that makes use of the unique advantages of the desert, and isn't necessarily enjoyed everywhere. Therefore, equestrian recreation is featured since it requires an adaptation to the desert terrain, whereas tennis is not included since the court and equipment are virtually the same anywhere the game is played.

Leave No Trace (LNT) and Tread Lightly

These two grassroots programs have done the most to engage people in responsible recreation; both programs are championed by state and federal land management agencies. LNT brochures and posters are a common site at visitor centers, and Tread Lightly works closely with off-road vehicle manufacturers and dealers.

The Leave No Trace Center for Outdoor Ethics has designed awareness programs to apply to all outdoor activity, and though Tread Lightly has been most effectively applied to off-road activities, it's also used for mountain biking, fishing, water sports, hunting, and horseback riding. Both programs benefit from the contributions of many volunteers who help teach the principles through schools, user groups, and youth groups across the country.

Leave No Trace focuses on seven key principles: Plan Ahead and Prepare, Travel and Camp on Durable Surfaces, Dispose of Waste Properly (Pack it In, Pack it Out), Leave What You Find, Minimize Campfire Impacts, Respect Wildlife and Be Considerate of Other Visitors. Once understood, these principles easily become habit-forming because they help ensure a positive recreational experience for all. Leave No Trace is a cost-effective educational program for the land managers because the outcome is a reduced demand for enforcement and maintenance. The National Park Service, in particular, relies on users following the LNT guidelines since its maintenance budget has not kept pace with inflation, even as the number of structures and facilities in its care has increased.

LEAVE NO TRACE — <http://www.lnt.org>

TREAD LIGHTLY — <http://www.treadlightly.org>



HIKING & BACKPACKING



Because of the desert's association with intense heat, strong winds, limited water, and venomous wildlife, many people shy away from exploring it on foot, and fail to seek out the backcountry as they might at mountain lakes or redwood forests. It's true that no one should venture on even a day hike in the desert without basic survival skills, ample water, a map, and a knapsack full of supplies that can sustain you overnight. What's not true is that the California desert is a flat, boring place absent of awe-inspiring scenery.

The desert holds snow-covered mountains over 11,000 feet, cascading waterfalls, volcanic formations, hot springs, and a deep, resounding quietude that will sharpen the senses as the hours pass. These natural features and sightings of bighorn sheep, deer, tortoise and wild coyotes are best experienced away from the roadways, away from the ranches, and away from the bright lights. To become part of the undisturbed settings and rock canyons of the desert requires more than an hour or two. So set aside some modern conveniences and challenge yourself to rely upon body and mind.

Plan to hike along established, public trails or create your own California desert journey on public lands that encourage exploration. Consult the abundance of books, maps, and trail pamphlets available at local outfitters, BLM district offices, state and national park gift shops, and of course, the Internet. Desert trails may not be well

marked, and even though footprints can remain undisturbed in the desert for decades, it's a good idea to carry along trail maps and guidebooks to flora and fauna.

The regional trail systems with the most significance are the Juan Bautista de Anza National Historic Trail, the Pacific Crest Trail, the Old Spanish National Historic Trail, and the California Riding and Hiking Trail, of which thirty-five miles pass through Joshua Tree National Park.

For the more casual hiker, several lush palm oases are only a short walk from a main road. The National Natural Landmarks in the desert region are administered by NPS, and worth exploring on foot. You can walk among the springtime wildflowers in bloom anytime from February to June, depending upon rainfall and elevation. Among the most popular areas to view flowers are the Antelope Valley Poppy Reserve and the Anza-Borrego State Park.

Responsible hiking and backpacking begins with the principles of Leave No Trace (see sidebar, page 5). In the open desert, the soil structure includes a protective crust that retains moisture, resists the establishment of non-native weeds, and enables the transfer of nutrients. This crust, if damaged, does not readily reconstitute itself. Wherever possible, stay on trails, and limit camps to bare rock or sandy areas that are already disturbed. And camp far away from natural springs and sources of water so you don't discourage visits by the wild animals that depend upon them.

ABOVE

Spectacular view from Pinto Mountain in Joshua Tree National Park

PHOTO BY HOWARD GROSS

PERSONAL PROFILE

Jeff Baierlein

EXECUTIVE DIRECTOR, BOOJUM INSTITUTE FOR EXPERIENTIAL EDUCATION

Jeff's extensive interaction with nature and the desert has instilled a life-long love of wild places. "The desert is a magical place," Jeff said. "The open vistas and wonderful starry nights give desert explorers a spiritual renewal." Jeff is proud to point out that in 31 years, the Boojum Institute has challenged over 70,000 young adults to participate in its outdoor education, rock climbing, challenge course, canoeing and backpack programs in locations such as Joshua Tree National Park and the public lands along the Colorado River.

He knows firsthand the value of giving young people access to the desert national parks and providing them the opportunity for a hands-on investigation of natural history and problem-solving in the outdoors. Jeff recalls one student, Joanna, from an urban center of Los Angeles who took a high school trip with Boojum to Joshua Tree National Park. "After camping out in the desert and rock-climbing in the Park, she felt like she could do anything in the world. Her self-confidence and love of nature just exploded, and she later applied to be an Outdoor Education Intern at the Institute to study our experiential, hands-on method of education. Now Joanna is completing her doctorate in Experiential Education and is the principal of an environmental high school in Los Angeles. It's inspiring to see generations of youth profoundly and positively effected by their experience in this special National Park."

BELOW LEFT

Young urban hikers enjoy desert adventures

PHOTO BY BOOJUM INSTITUTE

BELOW RIGHT

Lost Palms Oasis in Joshua Tree National Park

PHOTO BY HOWARD GROSS

http://www.npca.org/desert_recreation/hiking.pdf





HIKING & BACKPACKING CONTINUED



ABOVE LEFT

Golden Canyon in Death Valley National Park

PHOTO BY DAVID P. ANDERSON



ABOVE RIGHT

Wildflower season showcases color in Joshua Tree National Park

PHOTO BY D. A. DEMEO

WILDERNESS AREAS

A backpacking trip of any duration will likely include some time in a designated wilderness area. Although the California desert is home to approximately 75 wilderness areas, some of the largest and most easily accessed areas are found within the state and national parks. You can reach all the wilderness areas without a four-wheel-drive vehicle, though it may mean hiking or mountain biking along rough roads that lead to the wilderness boundary. Unlike open recreation areas, wilderness areas prohibit the use of motorized or mechanized travel so that these spaces can be preserved for future generations. Also, depending upon the season of the year and the public land agency, additional restrictions may be in place to protect wildlife breeding or prevent wildfires. Please check on the local rules, allowable recreation types, and backcountry permits associated with the places you plan to visit.

Backcountry hiking generally includes few established trails. Hikers need to possess advanced skills and enjoy the challenges of traversing the lesser-known terrain. In the national parks, aircraft are usually restricted from the wilderness spaces, which means you can encounter absolute solitude and be transported to another period in our nation's history.

After a hard day of hiking, who wouldn't enjoy a trip to a mineral hot spring? Many of these springs have been turned into private resorts, but there are still a few on public lands, including the Tecopa Hot Springs County Park, just north of Tecopa, off CA 127; the Saline Valley Hot Springs near Olancho, in Death Valley National Park; the Agua Caliente Hot Springs County Park near Anza-Borrego State Park; and the Desert Oasis Hot Spring Spa, east of Holtville, managed by the BLM.

Books and Online Resources for Hiking and Backpacking can be found at http://www.npca.org/desert_recreation/hiking.pdf and on page 47 of this report.



http://www.npca.org/desert_recreation/hiking.pdf



ABOVE LEFT

Backpacking excursions can provide unexpected rewards

PHOTO BY BOOJUM INSTITUTE

ABOVE RIGHT

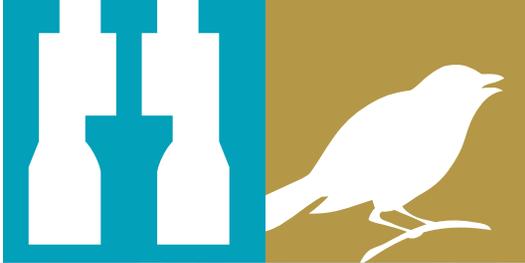
Seasonal waterfall, Rattlesnake Canyon in Joshua Tree National Park

PHOTO BY HOWARD GROSS

LEFT

Little San Bernardino Mountains in Joshua Tree National Park

PHOTO BY D. A. DEMEO



WILDLIFE VIEWING & BIRDING



ABOVE
Providence Mountains State Recreation Area
PHOTO BY D. A. DEMEO

Observing the varied wildlife within the California deserts can be a never-ending quest. A remarkable assortment of birds, waterfowl, reptiles, mammals, and plants live within these boundaries, some only temporarily. Many of these animals have made amazing adaptations to survive in the desert. The endangered Devil's Hole pupfish, for instance, lives in one of the earth's hottest and smallest bodies of water, near Death Valley Junction.

Watchable Wildlife Inc. is a non-profit organization dedicated to "help communities and wildlife prosper." The group helps local communities achieve the economic benefit of nature-related recreation while conserving native plants and animals in their natural habitats. This is done through research that isolates locations with special ecosystems, and through the establishment of educational trails (marked in the field with a binocular icon on trail head signage). All the major public land management agencies in the desert work cooperatively with Watchable Wildlife. Desert itineraries may be found at the web site listed in the resources section at the end of this guide.

PHOTOGRAPHY & VISUAL ARTS

Photography is often an inseparable part of enjoying wildlife. Fortunately, video and photography tools now include digital devices that are lighter and easier to use than the large-format camera Ansel Adams used to capture the beauty of western landscapes. Even an infrequent visitor to the desert can capture high-quality images with this equipment. Only the harsh sunlight of the summer or midday lighting interferes with capturing the subtlety of the desert. You can learn more about wildlife photography by taking workshops at the desert national park asso-

ciations or community colleges, or joining the California Nature Photographers. A few suggestions for sites to visit are also available at <http://www.californiadesert.gov>.

Many artists would prefer to reach for their portable easels, pencils, paintbrushes and paints. They may focus their eyes on a single location for hours at a time, studying their subject and losing themselves in the creative process. Art associations, such as the California Art Club schedule desert tours and exhibits for their members.

PLANTS

For the first-time visitor, the plant life in the desert is easy to dismiss as lacking the color or diversity of coastal, mountain or sagebrush biomes. There are no dense forests, and much of the wild brush appears dry, colorless, or spiny. Many visitors gain their first appreciation during springtime, when that brush takes on the varied hues and unique forms of the annual wildflower season. In 2005, a record rainfall provided a revelation to many visitors, one that may inspire future visits. While many people enjoyed the fields of desert sunflowers at Death Valley National Park, others took in the fields of orange at the Antelope Valley California Poppy Preserve.

On subsequent trips, visitors may find out about Joshua trees (*Yucca brevifolia*), members of the lily family that live to be hundreds of years old. But the real mystery of the ages belongs to the Creosote bush (*Larrea tridentata*), an aromatic shrub that grows in clonal rings. In the Soggy Dry Lake south of Barstow, the BLM protects the 12,000 year-old "King Clone," as scientists work to determine if it is indeed the oldest living thing on earth.



LEFT

Creosote shrub and cactus in Mojave National Preserve

PHOTO BY HOWARD GROSS

BELOW LEFT

Red-tailed Hawk surveying prey from Yucca branch

PHOTO BY TONY RILEY

BELOW RIGHT

Bird Watching in Joshua Tree National Park

PHOTO BY D. A. DEMEO

http://www.npca.org/desert_recreation/wildlife.pdf





WILDLIFE VIEWING & BIRDING CONTINUED



BIRDING

The southern California deserts are a birding paradise for many reasons. The climate is attractive for most of the year and the topographic variety allows for much diversity. The region is located along the seasonal migration path for numerous species and offers the option for non-resident birds from adjacent regions to relocate seasonally. Although widely dispersed, the lakes, rivers, oases and riparian habitats offer respite to birds traveling on long journeys. The number of native birds not found elsewhere in California may surprise a newcomer to birding. Gila and ladder-backed woodpeckers, vermilion and brown-crested flycatchers, Bendire's, Crissal and Le Conte's Thrashers, summer tanager, Lucy's warbler, Abert's towhee, Gambrel's quail, white-winged doves and Inca doves, verdin, black-tailed gnatcatcher and gilded flicker all call the desert their primary home.

To make sure that their presence doesn't disturb wildlife, birders follow a code of ethics, available from the American Birding Association. "Everyone who enjoys birds and birding must always respect wildlife, its environment, and the rights of others," reads one of the basic principles. "In any conflict of interest between birds and birders, the welfare of the birds and their environment comes first."

Popular desert locations offering the most diverse selections of birds include the Salton Sea National Wildlife Refuge, the Big Morongo Canyon Preserve, and the Cibola National Wildlife Refuge.

REPTILES & MAMMALS

Many of the reptiles and mammals that make the desert home find it much easier to hunt for food and move about during the cooler hours of dusk and the evening. If you're looking to catch a glimpse of these animals, bring along a flashlight, exercise the typical precautions of desert exploration, and keep a respectful distance from the wildlife.

The desert tortoise (*Gopherus agassizii*), a signature species in the region, is California's State Reptile, and lives for 50 to 100 years. Observed populations of the tortoise have been declining rapidly and it is now classified as threatened. This wise and peaceful resident is quite sensitive, so it's important to take precautions in its presence. Humans must not touch, pick up, or harass tortoises. You might see a tortoise just about anywhere in the high desert valleys and washes, but you'll increase your odds if you look during the springtime and if your visit includes a stop at the BLM's Desert Tortoise Natural Area.

Books and Online Resources for Wildlife Viewing and Birding can be found at http://www.npca.org/desert_recreation/wildlife.pdf and on page 48 of this report.

ABOVE

Desert iguana leaning against rock formation

PHOTO BY HOWARD GROSS



http://www.npca.org/desert_recreation/wildlife.pdf



ABOVE LEFT

Hiker observes from a distance and does not touch tortoise to protect this threatened species

PHOTO BY BOOJUM INSTITUTE

ABOVE RIGHT

Bird watching on east side of Salton Sea

PHOTO BY D. A. DEMEO

LEFT

Rattlesnakes are a common sighting in warm weather

PHOTO BY TONY RILEY



ROCK CLIMBING & BOULDERING



It's exciting and challenging to stare up the face of a wall of rock as you ascend and rely on your wits and determination to reach the top. In free climbing, each discovered handhold and foothold is a victory that propels you forward. Every climb is a chance to learn more about yourself and your gear. But this seemingly simple combination of rope and harness is quite technical. Newcomers need to take climbing classes and learn precautions to avoid becoming an unfortunate statistic.

Rock climbing is the form of recreation credited with bringing the largest number of visitors to Joshua Tree National Park each year. The park has a worldwide reputation for its granite rockscapes and thousands of routes. There are other climbing sites in the desert, but none have the support services and climbing organizations that are concentrated in Joshua Tree.

Like surfers, rock climbers have their own lingo and personal style. As climbing has grown in popularity, new specializations have emerged. Bouldering is a free-form style that is distinct from traditional and sport rock climbing. It generally attracts younger participants and embodies a

riskier anarchy in the types of techniques and routes selected. The descent is made without a rope, and a large pad is placed at the base of the climb to break a fall. To minimize the damage to natural resources, bouldering pads should not interfere with the native vegetation, and chalk lines need to be cleaned; at no time should climbing be done in an area with petroglyphs.

Climbing reinforces trust and cooperation. You'll hear participants refer to "the climbing community" because they rely upon one another for safety and the development of new techniques. In its mission statement, the Friends of Joshua Tree "encourages ethical and environmentally sound climbing practices." In cooperation with the Access Fund, these groups are helping to preserve and restore vegetation near popular climbing sites, define appropriate bolting and rappelling anchors on the climbing routes, and reduce the proliferation of social trails.

Books and Online Resources for Rock Climbing and Bouldering can be found at http://www.npca.org/desert_recreation/climbing.pdf and on page 49 of this report.



ABOVE

Crack climb

PHOTO © SAM ROBERTS

RIGHT

Leaping Leaner climbing route

PHOTO © SAM ROBERTS

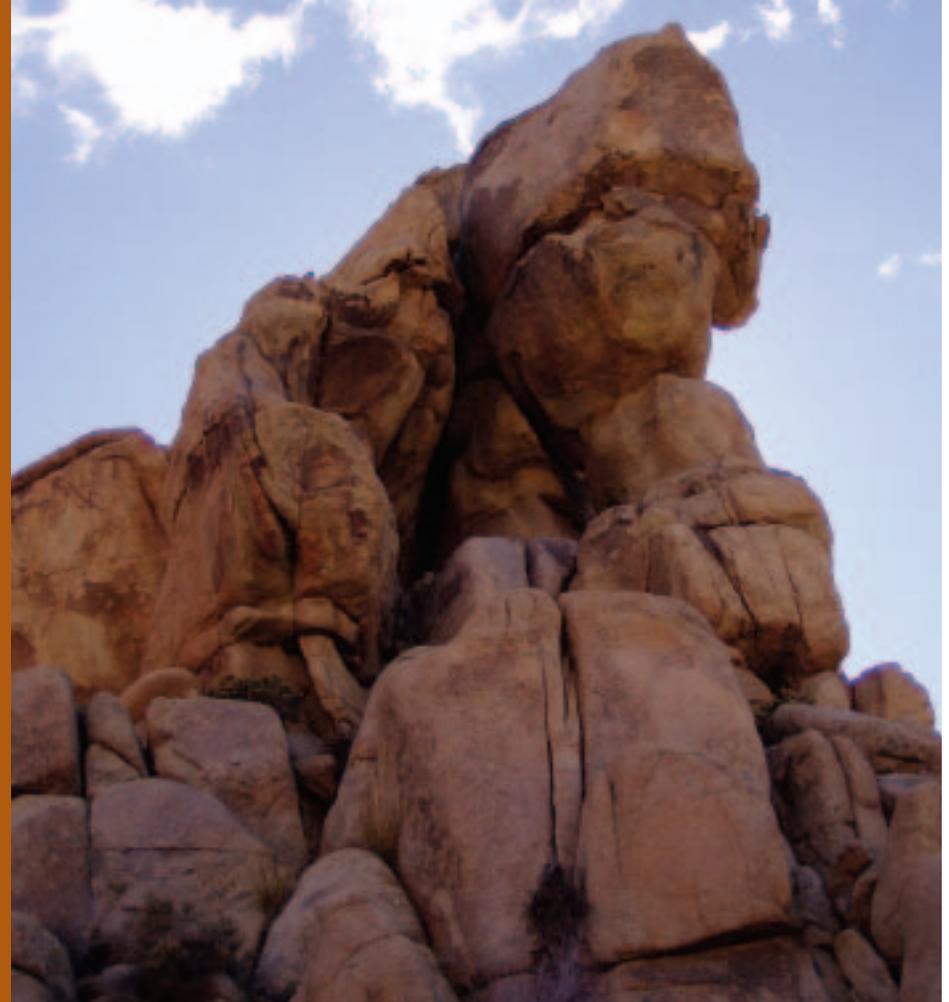
PERSONAL PROFILE

Lisa Evans

MOTHER AND OUTDOOR EDUCATOR

Lisa Evans started rock climbing as a teen and earned her undergraduate degree in Outdoor Education twenty years ago. In the interim, motherhood became her priority. A few years ago, she took a 10-day first responder wilderness course with one of her four children. This inspired her to re-examine her earlier passion for the outdoors during a month long course at the National Outdoor Leadership School (NOLS). The NOLS experience included ten intensive and exhilarating days of rock climbing in Arizona. From that point on, Lisa knew that she would have to find opportunities to leave Orange County on the weekends and visit Joshua Tree National Park as often as possible. With the assistance of Markus Jolliff, an experienced climber and mountain guide, she regained confidence, expertise, and an awareness of how to pursue climbing in a responsible way. She loves the precision of movement and connection with the land that climbing gives her. Even more importantly, she loves the way climbing has become a family sport and a way to bond over the Christmas holiday.

For anyone interested in climbing, Lisa recommends classes through the Desert Institute and Leave No Trace to build a strong ethic about respecting the desert. She also feels that new climbers will benefit from instruction through a qualified guide service. As she pointed out, "There's lots of life in the desert."



http://www.npca.org/desert_recreation/climbing.pdf



ABOVE

Lost Horse Boulders in Joshua Tree National Park

PHOTO BY D. A. DEMEO

FAR LEFT

Climber Lisa Evans and her family in Joshua Tree

PHOTO BY MARKUS JOLLIFF

LEFT

Chiraco Summit on southern side of Joshua Tree National Park

PHOTO © SAM ROBERTS



CAVING



Desert caves largely remain an unknown mystery to most visitors. Except for those caves that have been artificially adapted for public tours, it takes a lot more than a daring sense of adventure to successfully navigate these underground chasms. Caving is a highly technical sport and is not to be undertaken by anyone without the proper skills, training, and support. Most public land managers and park rangers won't even reveal the locations of caves for fear that someone will rashly set upon an exploration that ends in the loss of a life.

While some caves are very small and their exploration involves plenty of crawling, other caves are 1,000 feet long with rooms as big as 80 by 20 feet, and multiple levels. If caving appeals to you, you can join a local grotto (club) and begin the instruction that will ultimately prepare you to explore the more difficult caves. Some of the following caves and underground features in Mojave Desert Preserve and Death Valley National Park can provide a great introduction to caving, as their exploration requires minimal preparation.

Mitchell Caverns are part of a Natural Preserve in the Providence Mountains State Recreation Area. The caverns were originally discovered and developed by a desert resident named Jack Mitchell, and have been equipped with paved

walkways, handrails, and electric lights. Like all caves, they are at a constant and cool temperature. The Caverns are situated at an elevation of 4,300 feet, and provide a stunning view of Wild Horse Mesa and Fenner Valley to the east.

Not far from Mitchell Caverns are two different examples of formations called lava tubes. Near Cima, in the Mojave National Preserve, are lava domes that have open caverns beneath them with access by ladder. BLM lands farther west include the Pisgah Crater-lava tubes. The Arroyo Tapiado Mud Caves are a spectacular geological formation in the Anza Borrego Desert State Park. Navigating through these caves generally requires a greater level of fitness, some specialized equipment, and the knowledge of an experienced guide.

Responsible caving requires the principles of Leave No Trace applied in an even more conscientious manner. It's impossible to enter a cave without leaving some sort of an impact that can never be repaired. A cave is a fragile and sensitive environment that demands an acute awareness of conservation.

Books and Online Resources for Caving can be found at http://www.npca.org/desert_recreation/caving.pdf and on page 50 of this report.



ABOVE

Jaime Lintemoot rappels into a Mojave Desert cave

PHOTO BY ALLEN HAGER

RIGHT

A family approaches the entrance to Mitchell Caverns

PHOTO BY D. A. DEMEO



LEFT

Two cavers explore an underground chamber

PHOTO BY JOHN CHARLES WOODS

BELOW

John Woods crosses a deep crevice in a Mojave Desert cave

PHOTO COURTESY OF JOHN CHARLES WOODS

http://www.npca.org/desert_recreation/caving.pdf

PERSONAL PROFILE

John Woods

MEMBER OF NATIONAL SPELEOLOGICAL SOCIETY, SOUTHERN CALIFORNIA GROTTO AND PROFESSIONAL PHOTOGRAPHER

John knows caving. As a member of the Southern California Grotto since 1966, his personal advice to new cavers is, “We would rather train you than rescue you.” John points out that the difference between a true caver and the occasional spelunker is training. Even with his expertise, Woods never caves alone. Cavers work together, rely on each other, and take special precautions that inexperienced people might not even consider.

When John was 12 years old, he read a book on caves that mentioned Carlsbad Caverns. Once he convinced his parents to take him, he instantly fell in love with the silence of the cave, its antiquity, and the cathedral-like magnificence of the place. Shortly thereafter he went to Mitchell Caverns, where a California state ranger told him about the Southern California Grotto — he’s been caving ever since. John still visits Carlsbad every year.

Though caving is a physically demanding and rather uncomfortable sport, it’s always exciting. Cavers see themselves as contemporary counterparts to the explorers Lewis and Clark. “We want to see where it goes, and go somewhere no one has been, we want to know why and where. I’ve been to places that no one has ever been before. That’s the big draw for caving.”

Caving is a recreational pursuit that demands a continuous awareness of resource protection. If cavers aren’t careful to respect the conditions in these limited passages, which often contain only a single route, they could cause irreversible damage to the rock resources or flora and fauna. Many caves are closed during certain times of the year due to bat breeding activity. John has helped the NPS by gating off certain areas and restoring caves that have been negatively impacted. Fortunately, his efforts are bringing insects and bats back to those caves.

There is one club motto that sums up the group’s dedication to responsible recreation, “Take nothing but pictures, leave nothing but footprints. Kill nothing but time.”





ORIENTEERING



In the California desert, west of Yuma, is “The Official Center of the World.” This little-known geological assignment was bestowed in 1989 by the Institut Geographique National of the French Government with the coordinates, Long: 114° 45’ 55.35” W; Lat: 32° 45’ 1.38” N. The rest of us might recognize the site as Felicity, California (pop. 4), a town that has creatively cultivated this unique designation and used it to attract visitors.

If you’re the type of person who enjoys making new discoveries and savors a good a treasure hunt, then orienteering is the activity for you. It doesn’t require exceptional agility or strength. Even so, you will likely find yourself tired at the end of the day as you unconsciously scramble to places you might not have gone without a handy geographical positioning (GPS) unit. Many traditionalists and most beginners find that the hardcopy version of a map and a compass are preferred, while others supplement their travels with the GPS because of its ability to track and record. Whether you employ paper or microchips, this activity cultivates an awareness of geography and allows participants to create their own game of “Survivor.”

The hunt can be done individually or in groups. From the starting point, orienteers consult clues and maps to navigate to various points of interest. The challenge may require participants to collect objects or flags to prove they’ve reached a certain milestone. Alternatively, orienteers may be asked to record the waypoint or photograph a physical feature. Competitions often require timed

runs; sponsors of the more professional events even offer prizes. Orienteering is most often done while hiking or running, although orienteering from the seat of a mountain bike is gaining popularity.

Due to the popular use of GPS, a subset of orienteering called “geocaching”™ has attracted many new participants. At designated coordinates, small trinkets and a written list are hidden and the location is posted at a web site. Anyone can use a GPS unit to find a way to the coordinates, then take one of the trinkets (CD, small toy, etc.) as long as they leave one behind. Participants generally write their names on the list or take a photo of their party using a disposable camera stashed at the cache.

By joining an orienteering club or association, such as the International Orienteering Federation or the U.S. Orienteering Federation, not only can you benefit from the routes they’ve developed, but you may even be inspired to create challenging courses for others. Since orienteering is largely a non-motorized sport, it can be enjoyed within wilderness areas and multi-purpose recreational areas alike. The guidelines for responsible pursuit of this activity are similar to hiking: Just adhere to the “Leave no Trace” principles, carry an ample amount of water, and be prepared to survive overnight if you do get lost; never permanently alter the features of the terrain to mark the trail.

Books and Online Resources for Orienteering can be found at http://www.npca.org/desert_recreation/orienteering.pdf and on page 50 of this report.

ABOVE

Map and compass skills broaden access to wilderness areas

AP PHOTO/PHOTO BY MARY ESCH

PERSONAL PROFILE

Bethe Rios

SEARCH AND RESCUE VOLUNTEER

Bethe Rios is not from the desert, or even from southern California. She grew up near a woodland region of the northeastern U.S. As a child, she was adventurous and learned to navigate by memorizing landmarks. Upon arriving in the desert as an adult, she realized that technique alone would fail her. She took a map and compass class, was relieved to finally get her bearings, and then used her zeal for the activity to earn her certification for search and rescue. She now volunteers with orienteering and survival classes at Joshua Tree National Park Association Desert Institute and leads hikes for the Coachella Valley Hiking Club.

Bethe recommends that every outdoors person acquire survival skills. The ability to understand a map and properly use a compass are essential problem-solving skills, even with the advent of technology. "You can take a GPS unit into the woods and still get lost," she says. "It's a good tool, but it is an accessory, not a lifesaving tool."



http://www.npca.org/desert_recreation/orienteering.pdf



ABOVE

Desert Institute students navigating by traditional methods

PHOTO BY BARBARA CLARK

FAR LEFT

Bethe Rios exploring the Eagle Cliff Mine

PHOTO COURTESY OF B. RIOS

LEFT

View of Indian Cove from top of Gunsight in Joshua Tree National Park

PHOTO BY HOWARD GROSS



ROCK HOUNDING & GEMOLOGY



Today, many amateur geologists, craftsman, and jewelers in California hear the siren call to “strike it rich” in the California desert. These so-called “rock hounds” rove the land to discover minerals and gemstones such as jasper, turquoise, agate, opal, geodes, and petrified wood. Most of the popular sites are accessible by car or four-wheel-drive vehicles, but they have been heavily visited, so finding good samples often requires a substantial amount of hiking and digging. No expensive gear is required. To get started, you’ll just need a variety of hand tools and the common sense rules of desert exploration.

This activity can be structured as a dedicated, weekend family destination or it can be combined with other desert recreation. For example, a road trip along old Route 66 near Ludlow can include a stop to search for carnelian before heading toward a tour of Amboy Crater. Be forewarned, however, that after a special stone is discovered, casual participants can quickly become devoted hounds. Categorization of rocks is facilitated by one of the guidebooks listed in the resources section, or the web site for the Mineral and Gemstone Kingdom. As interest in this activity deepens, participants may expand their knowledge of geology and seek out the diverse formations that have been preserved in the three California desert national parks.

Gem and mineral clubs like the Mineralogical Society of Southern California can offer information on prime locations through organized trips and introductory presentations. It is important to limit the collecting to designated areas and be aware of the regulations that govern collection limits and restrictions. California’s State Parks prohibit gem collecting. On federally managed public lands, no collecting is allowed in National Park Service units, but the collection of “reasonable” quantities of rocks, minerals, semiprecious gemstones, and invertebrate and plant fossils of non-scientific importance is permitted within certain Bureau of Land Management areas. The activity must be limited to personal use and not done on mining claims without permission of the owner. While driving on unimproved roads, OHV trails and sandy washes, rock hounds need to keep in mind the Tread Lightly principles and respect all excavation sites in a manner outlined experienced hounds like author J.R. Mitchell. Since many sites are home to the desert tortoise, rock hounds need to respect this fact, and not touch or move this threatened species.

Books and Online Resources for Rock Hounding and Gemology can be found at http://www.npca.org/desert_recreation/hounding.pdf and on page 51 of this report.

ABOVE

Buffing agate: Rock hounds often convert their discoveries into attractive crafts

AP PHOTO/PHOTO BY ERIK PETERSEN

PERSONAL PROFILE

Rick Banta

RETIRED MARINE AND SPORTSMAN'S CLUB CHAIRMAN

Rick Banta was introduced to rock hunting in 1956 while serving as a U.S. Marine at Twentynine Palms. A gunnery sergeant (gunny) asked him for a jeep from the motor pool and Rick got behind the wheel. Instead of picking up small boulders for road maintenance, the gunny had him drive far afield as they hunted for jasper. With their bounty secured, he introduced Rick to the rock hobby shop on base. Almost fifty years later, the thrill of being the first person to see inside the rock and revel in its mystery still intrigues him. Rick thinks about the rocks' million-year old histories and enjoys being the only one to see their formations before crafting them into jewelry and collectibles. As a leader of the Joshua Tree Sportsman's Club, Rick helps put together an annual gem show that attracts hobbyists and geologists from throughout the southwest U.S. New rock hounds can get around some of the challenges of identifying and cutting rocks by planning their first expedition with experienced rockhounds like Rick.



http://www.npca.org/desert_recreation/hounding.pdf



ABOVE

Rare and common treasures from various desert locations

PHOTO BY D. A. DEMEO

FAR LEFT

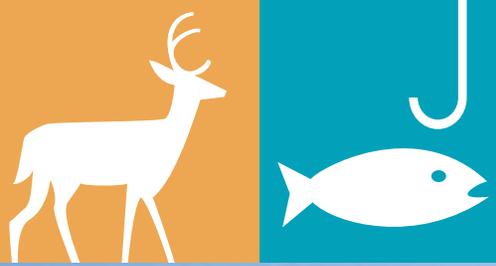
Rick Banta examines a rock specimen and recounts a recent field trip

PHOTO BY D. A. DEMEO

LEFT

BLM sites like this one permit rock collection for personal use

PHOTO BY D. A. DEMEO



HUNTING & FISHING



The tradition of game hunting has always been linked to the establishment of the U.S. national parks, thanks to the leadership and vision of Theodore Roosevelt. And the strong conservation ethic of Roosevelt and other sportsmen still resonates to this day. As it was then, and is now, hunting and fishing are opportunities to pit your resources against the challenges of the outdoors, spend time with friends, and savor the rewards of the day over dinner.

In the desert regions, the modern hunter is primarily after game birds like chukar and quail. Big-game hunting in the higher elevations of the Mojave Desert revolves around the mule deer (fewer than a dozen permits are issued annually for the hunting of bighorn sheep or pronghorn antelope). The desert generally attracts occasional hunters who rely on shotguns and rifles rather than on the bow and arrow, which require advanced skill.

The number of deer and archery tags (licenses) are restricted in the southern California deserts due to the limited deer habitat and population levels. Tags are available at the state's web site through a drawing every June, but they go quickly. The desert region deer hunt and license zones are X9C, D12, D14, D16, D17, and D19; maps for these zones clearly identify agency boundaries. These zones include BLM lands, the Mojave National Preserve, and wilderness areas. Due to the varying regulations at these sites, it is a good idea to check for any special restrictions on vehicle access.

Since the vast majority of desert hunters track and shoot birds, the Game Bird Heritage and Wildlife Outreach Program is especially effective in attracting new hunters and providing reliable information. This program is coordinated in conjunction with Quail Unlimited, the National Wild Turkey Federation, and local dog handlers. Bird hunting can be an especially enjoyable pastime, as it's often done in the company of a good dog, and stalking prey over rough terrain is a great way to burn calories. Note that the BLM has designated a large part of the desert below Interstate 40 for shotgun use only (no rifles or handguns), but several multipurpose areas allow shotgun use in conjunction with other recreational activities.

To hunt ducks, you must possess a valid California hunting license, a California Duck Stamp and a Federal Migratory Bird Stamp. Ducks and geese may be hunted along the Colorado River and a large duck hunting facility lies at the Wister Wildlife Refuge along the eastern side of the Salton Sea.

A variety of organizations encourage young people to become attuned to hunting and fishing. Ducks Unlimited has a local presence and a web page devoted to California Ducks Unlimited. The organization runs youth training through its Green Wing program. The California Department of Fish and Game runs "YO!" or Youth in the Outdoors clinics. The National Rifle

ABOVE
Mojave Desert Chukar expedition,
High Desert Guide Service

PHOTO BY JIM NIEMIEC



LEFT

Fishing from a Bombay Beach jetty in the Salton Sea

AP PHOTO/PHOTO BY REED SAXON

BELOW

Tony Riley's Striper catch along the Colorado River

PHOTO BY TONY RILEY

BOTTOM

Duck Hunting at Wister Unit of the Imperial Wildlife Area

PHOTO BY MIKE HAMAMURA



http://www.npca.org/desert_recreation/hunting.pdf

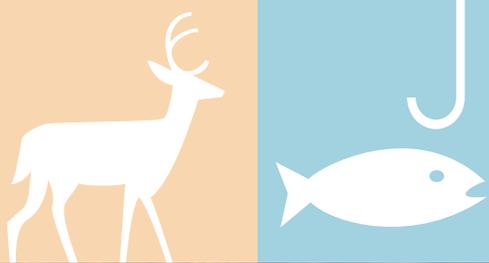
PERSONAL PROFILE

Tony Riley

BUSINESSMAN AND JOURNALIST

Tony Riley is an experienced, active hunter and angler. In the many years he has spent in the desert, he's become a proficient wildlife photographer as well. Tony relates the current catch of the week, equipment advice, and anecdotes through his outdoors columns for The Desert Dispatch/Victorville Daily Press newspapers. On many days he can be found at his Barstow sportsmen's store of 29 years, Riley's Reloader. He'd like to see more young people learn proper gun safety and develop an appreciation for the outdoors the way he did. Like other sportsmen, he feels that the societal ills of childhood obesity and gang violence could be avoided by giving youth a healthy dose of fishing and hunting in the outdoors.





HUNTING & FISHING CONTINUED



Association conducts firearm safety classes through its “Eddie Eagle” program. The National Archery in the Schools Program is yet another excellent way to introduce youth to outdoor game hunting.

Hunter education classes are “ground zero” for developing responsible hunters. The California Department of Fish and Game conducts several programs managed by volunteers, and they are the most comprehensive programs available. During established hunting seasons, the BLM encourages all hunters and recreational shooters to use lead-free nontoxic shot and bullets. Nontoxic shot significantly reduces the risks of accidental lead poisoning of wildlife and has a minimal impact on the environment. Likewise, hunters should always pick up casings after target practice, in following with the principles of Leave No Trace.

As difficult as it is to imagine, many anglers use the desert as their base of operation. Fishing may be done

from the shore or out on a boat. Most sites are stocked with fish, but native populations exist at the Salton Sea and the Colorado River. At the Salton Sea, the catch is tilapia, gulf croaker, sargo and orangemouth corvina. Along the Colorado River, the catfish can run between 60 and 70 pounds. Lakeside at Mojave River Narrows in Victorville, it’s possible to fish for trout in the fall and winter and catfish in the summer.

To fish or catch reptiles in California, you must obtain a sport fishing license; if you’re fishing from a boat in the Colorado River, you must also obtain a Colorado River Special Use Stamp. Before planning your next outing, you’ll want to consult specific local regulations on bait and bag limits as well.

Books and Online Resources for Hunting and Fishing can be found at http://www.npca.org/desert_recreation/hunting.pdf and on page 52 of this report.



ABOVE

Big game hunting is a challenge in the desert mountains

PHOTO BY TONY RILEY

RIGHT

Mojave National Preserve

PHOTO BY HOWARD GROSS



http://www.npca.org/desert_recreation/hunting.pdf



ABOVE LEFT

Camouflage and perseverance yield Chukar bounty, High Desert Guide Service

PHOTO BY JIM NIEMIEC

ABOVE RIGHT

Dove Hunting in Heber, CA

AP PHOTO/PHOTO BY FRANCISCO J. MARTINEZ

LEFT

Fisherman proudly shows catch of the day

PHOTO BY TONY RILEY



BIKING



ABOVE
Mountain biking along desert trail
PHOTO BY CHUCK HANEY

Bicycling is not just a simple two-wheeled sport anymore. The sport includes road biking (racing ala Lance Armstrong or touring with camping gear), bicycle motocross (BMX) and a variety of mountain biking genres. Different types of biking attract different types of riders, require different skills, and take place on different types of tracks and trails.

Some mountain biking, called “freeriding”, is pursued as an extreme sport. Though it’s featured in ad campaigns and in films like *Third Down*, there are no designated public facilities for this in the desert. Trail-based, cross-country, mountain biking is the form that is commonly found in the desert.

The Tour de Palm Springs is a popular annual road race that passes through urban and open lands alike, skimming along the southern side of Joshua Tree National Park. With thousands of cyclists competing on routes of up to 100 miles, this charity event is one of the largest in the country. The Death Valley Century and Double Century is another road race held each spring and fall, and one that attracts premium riders on a grueling course through Death Valley National Park. If you’re looking for a more leisurely pace on the road, private tour companies also schedule trips through state and national parks.

Compared to other forms of trail recreation, mountain biking options are still being defined by public land managers and bike enthusiasts. Some mountain bikers prefer narrow paths to trails along dirt roads because it puts them closer to nature and increases their fun. Public land managers are in the process of reviewing trail plans, and

redefining mountain biking as different from off-road vehicles, since each user group is seeking a different experience. In Joshua Tree National Park, bike riding had historically been restricted to roads open to vehicle traffic. The park’s Backcountry and Wilderness Management Plan now sets aside 29 miles of trails for non-motorized bike use and allows biking on seven miles of the California Riding and Hiking Trail. Most of the trails will be shared with horses, and all will be accessible to hikers. For now, that is the most common form of expanded access for bikes. For multiple-purpose trails shared by other user groups, the International Mountain Biking Association suggests bikers follow their Rules of the Trail, yielding the right-of-way to hikers and horse-back riders.

Mountain biking routes are found on BLM lands and other public lands throughout the desert. New riders should consult one of the popular books or web sites in the resources section for tried and true routes, or ride along with others who have experience on desert trails.

BMX, a form of competitive cycling that attracts younger riders, is usually confined to a track and requires special safety equipment. Many BMX riders develop skills that serve them as they later transition to mountain biking. The desert includes publicly owned tracks, typically managed by city or county government, with the help of volunteers. One example is the track that Hesperia Recreation and Park District maintains at Live Oak Park.

Books and Online Resources for Biking can be found at http://www.npca.org/desert_recreation/biking.pdf and on page 53 of this report.

PERSONAL PROFILE

Scott McKelvey

ACCOMPLISHED CYCLIST

Scott McKelvey has been biking since he was 10 years old. Most of the cyclists in the Coachella Valley recognize Scott as a frequent cross-country competitor who places highly in events throughout southern California. When he's not riding, he's doling out advice in his capacity as the manager of Palm Springs Cyclery. For newcomers to the sport, he acknowledges the fitness benefits of cycling, but thinks it's the sense of freedom that really attracts them.

Scott highly recommends the extensive cross-country trail system in the Santa Rosa and San Jacinto Mountains National Monument that rings the western edge Palm Springs. Scott and his boss at the Cyclery, Christopher Cross, point out that the area has about 250 miles of trails — the most anywhere in the desert. Local businesses know how important it is to maintain those trails, to ensure their own survival.

Scott rides road bikes as well as mountain bikes, and sums up the difference quite simply: "There's no boredom in mountain biking and it challenges you more than road biking." Yet, he also says about his road bike, "I commute everywhere now, my car sits at home."



http://www.npca.org/desert_recreation/biking.pdf



ABOVE

Scott McKelvey advocates desert bicycling on and off the road

PHOTO BY D. A. DEMEO

LEFT

Cyclists enjoy unique desert scenery on road races like the Tour de Palm Springs and the Death Valley Century

PHOTO BY MARK AHN

LANDSAILING



ABOVE

Sleek designs reduce drag and skim along the dry lake bed

PHOTO BY D. A. DEMEO

This thrilling sport is pursued on dry lakebeds throughout the world and generates camaraderie among participants and spectators. Sailors participate in races at several desert locations in California and Nevada. Although most participants are from the United States, people travel from Great Britain, Australia, and New Zealand to compete in the desert. On this continent, competitions culminate in the America's Cup held each spring, coordinated by the North American Land Sailing Association.

Landsailing is an exhilarating sport that brings action to the dry lake beds without the noise of motorized sports. It's done at Ivanpah Lake, El Mirage, and Superior Lake, when conditions are ripe enough to fill a sail with wind. This family-oriented sport requires some technical knowledge and a sense of adventure. Speeds of up to 45 miles per hour are reached in rigs only inches above the ground, often balancing on two wheels as racers change tack.

As with rockclimbing, the sport can be as technical as the participants choose to make it. Crafts range from the affordable, open-frame, California-manufactured Manta to sleek, custom, fiberglass rigs with adjustable sail area. BloKarts are landsailers that can be disassembled and shipped in the same space required by large luggage; although they are slower than other crafts, they can easily be placed into cars and on airplanes. Rigs are typically sailed by a single person, but there are two-person crafts as well. Racecourses are adaptable to both the larger craft that have longer legs and the smaller craft that do much more tacking and jibing. On open courses, landsailers follow the same right of way rules as do yachts.

As with any sport, personal safety gear such as safety belts, helmets, gloves, and goggles are standard.

Following rainstorms, sailors must engage in responsible use of the desert playa, waiting until the ground is dry enough to support the weight of their rigs. As a result, the structure of the surface soil is kept intact, leaving no tracks or ruts in their wake. In general, landsailers do not create braking or wheel marks since they aren't driven by engines.

The landsailing community engages in a variety of other conservation measures. Race coordinators limit the number of automobiles on the playa and use bicycles to establish and monitor the race course. At night, participants put their campfires in steel washing machine tubs to keep the fires from burning into the sand. In addition, event organizers advocate the principles of Leave No Trace throughout their race materials.

Several local clubs run classes and events, including the SASSASS Club, the Western Landyacht Club, the American 5 Square Meter Association, the Wind Seekers Blokart Association and the El Mirage Wind Wizards. Through the Outdoor Adventure Program at Edwards Air Force Base, servicemen and women sail on Mantas, which can be easily recognized thanks to the letters "ED" emblazoned on their sails.

Books and Online Resources for Landsailing can be found at http://www.npca.org/desert_recreation/landsailing.pdf and on page 53 of this report.

PERSONAL PROFILE

Pete Gilbert

LANDSAILOR

In Pete Gilbert's first week of racing, he moved up 12 places from the bottom of the pack by sailing a Manta twin. Landsailing is a lot less expensive than sailing on open water, and more accessible for newcomers. Although Pete had no prior experience, the sport offers several levels of racing, so he was able to compete as an amateur. Pete picked up the essential tips he needed from expert sailors who were readily available for coaching and mentoring. Since the Manta is easily trailered or packed on rack, Pete looks forward to picking up a used rig in the near future. He admires the world record holding landsailer, the Iron Duck, and looks forward to someday piloting the larger boats that cruise at 70–80 mph.



LEFT

Stepping the mast on a fiberglass rig with roller furling sail

PHOTO BY D. A. DEMEO

BELOW LEFT

Pete Gilbert has benefited from expertise of fellow sailors

PHOTO BY D. A. DEMEO

BELOW RIGHT

Manta landsailers jockey for position as race flag falls

PHOTO BY D. A. DEMEO

http://www.npca.org/desert_recreation/landsailing.pdf





HORSEBACK RIDING



What better association with the “wild west” is there than to experience the feel of a saddle on the open range? Wide vistas, bright sunshine, and the smell of the creosote shrub are the rewards of any visit to the desert, but riding a horse provides the historic authenticity that you just can’t get from the seat of an ATV. Fortunately, you can still find many places to enjoy this in southern California. If you haven’t progressed to the level of owning or boarding your own horse(s), there are stables conveniently located on or near public riding trails. In Mojave River Narrows Park, you can pay for a few hours on a steed, and ride past the camels that live in this desert oasis.

Trail riding is the most common form of equestrian excursion, but there are other ways to enjoy the company of a horse or mule in the desert. Spectators might take in an exhilarating rodeo or watch a mule team haul a payload. The Marine Corps Logistics Base Stables in Yermo, home of the Marine Corps Mounted Color Guard, is the site of rodeos and several equestrian events. Animal lovers can adopt a horse or burro through the BLM program (see resources section).

Because the desert holds few natural sources of water for horses to drink, and many of the trails aren’t easily accessed by trucks, this sport requires special considerations. Excellent safety and planning tips for desert horse-

back riding can be found at http://www.desertusa.com/Thingstodo/du_ttd_horse2.html#anchor75588. Responsible riding includes carrying pellet feed so horses don’t graze on park vegetation and removing manure from trailheads and campgrounds.

The Juan Bautista de Anza National Historic Trail offers riders a cultural heritage experience as well as an equestrian one. Thirty-eight miles of the Anza Trail are marked within BLM lands in the Yuba Desert, east of El Centro. A short segment of the trail exists in the southeast section of Anza–Borrego Desert State Park, passing near the San Gregorio marker. In the northwest section, the trail parallels Anza’s route through Coyote Canyon and contains markers for several Anza campsites. For the equestrian camper or day-user, the state park has a horse camp (Vernon Whitaker Horse Camp) complete with 10 campsites, 40 corrals, and showers. Horse trails and camps are also available at Ryan and Black Rock campgrounds in Joshua Tree National Park, and at Black Canyon Equestrian campground, located at Hole-in-the-Wall in the Mojave National Preserve.

Books and Online Resources for Horseback Riding can be found at http://www.npca.org/desert_recreation/riding.pdf and on page 54 of this report.

ABOVE

Horses contentedly grazing in Victorville, CA county park

PHOTO BY D. A. DEMEO

RIGHT

Stables are well-outfitted and maintained at Mojave Narrows Regional Park

PHOTO BY D. A. DEMEO





http://www.npca.org/desert_recreation/riding.pdf

PERSONAL PROFILE

Tara and Theresa Ott

RODEO CHAMPIONS

Tara and Theresa Ott are teenage sisters who live on a ranch in San Bernardino County, and who gladly spend more time with their horses than with an iPod or Gameboy. They trail ride, train horses, and compete in rodeo events like barrel racing and pole bending. The sisters started riding at an early age, and their well-earned athleticism has led Tara to dancing and Theresa to cross-country running. Tara likes the open rides on BLM land near her home; Theresa dreams of becoming a rodeo queen, and bringing other girls into the sport.



ABOVE LEFT

Granite Mountains,
Mojave National Preserve

PHOTO BY HOWARD GROSS

ABOVE RIGHT

Equestrian clubs arrange trail trials for fundraising and public land maintenance

PHOTO BY ANN WASHINGTON

LEFT

Trail riding is an option for families and all age groups

PHOTO BY ANN WASHINGTON



OHV / OFF-ROADING



According to a June 2005 report on the latest National Survey on Recreation and the Environment, California has 4.35 million off-highway vehicle (OHV) users. With a dramatic increase in the number of participants over the last five years, off-roading has become one of the fastest growing forms of recreation. As a result, public land managers, recreation planners, OHV dealers, and legislators have scrambled to update policies, establish boundaries that respect other types of recreation, protect private property rights, implement practical guidelines for safety, and promote a massive education effort for newcomers to the sport. This has not been easy, and many conflicts have arisen that have yet to be resolved.

It's easy to get caught up in the excitement of the sport. OHVs allow the average Californian's love affair with wheels to achieve the wind-blown freedom that is no longer possible on our gridlocked highways. The acronym OHV spans a wide variety of vehicles that are fun to tow behind an RV. No pavement is required, so there's no waiting around for CalTrans. But before you rush to join the hordes of OHVers in the desert, you'll need some background knowledge.

Vehicles allowed in off-highway recreation areas are those legally certified for sale by the California Air Resources Board, and properly identified or registered in California. Vehicles must have an approved muffler, brakes and spark arrester. Vehicles operated at night must use both headlights and taillights. Allowable OHVs include three-wheel and four-wheel (quads) all-terrain vehicles (ATVs), dirt

bikes, dual-sport motorcycles, four-wheel-drive pickup trucks and Jeeps, sport utility vehicles (SUVs), go-carts, dune buggies and sand rails. In this short summary, all of these vehicles will be classed together. However, in the field, they fulfill different niches; many user groups sponsor events for just one type of vehicle (e.g., Jeep tours or rail races).

Riding is done within vehicle recreation areas and on approved routes. Areas classified for "open" or cross-country recreation also allow RV and tent camping almost anywhere within the riding area or quite close to it. Open areas are the sites of organized races such as Motocross and events like the popular poker runs.

Partly because of the breadth of vehicle design, the routes on public lands are now assigned special designations to reflect differences in usage. Many riders will notice that signage and access to specific vehicle classes may change as management plans are updated. For example, some routes may allow ATVs and motor bikes, but not four-wheel-drive vehicles. The BLM posts "Closed Area" signs to control or prevent soil erosion, degradation of wildlife and cultural sites, and safety hazards (like open mine-shafts). Each BLM field office has detailed information on the many "open" and "limited" OHV areas it manages, including the areas that permit hunting, target practice, camping, and campfires. Special designations will ultimately result in greater access for riders, as the needs for law enforcement or emergency staffing and the protection of natural resources are more explicitly defined.

ABOVE

A caravan of off-roaders from the 29 Palms Tactical Training and Exercise Control Group (TTECG) who are known throughout the Marine Corps as the "Coyotes."

PHOTO BY MARC LACLAIR

PERSONAL PROFILE

Marc LaClair

LIEUTENANT COLONEL, 29 PALMS MARINE EXPEDITIONARY FORCE

Marc is a man who knows how to weave together the various loves of his life. Eleven years ago, Marc's battalion was called to deploy on short notice. Knowing he wanted to marry his fiancé before leaving, he drove his 1986 4x4 Jeep to Las Vegas and tied the knot in a drive-through wedding chapel. Today, he is still exploring the desert in that Jeep as well as a 1970 Ford Bronco.

His wife Lisa often joins Marc with friends and families on 4x4 caravans. They use local maps and GPS units on routes such as ones leading to the Dale Mining District on BLM land northeast of Joshua Tree National Park. They follow designated routes on the maps, they don't trespass onto protected desert, and they only drive unmodified, street-legal 4x4s. Marc wants to remind everyone to be prepared for emergencies lest you wind up cold, stranded, and wearing nothing more than a T-shirt and shorts with few options to call for help. He speaks from experience.

Conscientious off-roaders like Marc are more the norm than the exception in the desert. He enjoys the natural beauty of the desert. "I can see things you would never be able to experience otherwise," he says.



http://www.npca.org/desert_recreation/off_roadng.pdf



ABOVE

Johnson Valley is a popular OHV area for camping and hiking

PHOTO BY HOWARD GROSS

LEFT

El Mirage Dry Lake hums with activity on most weekends

PHOTO BY D.A. DEMEO



OHV / OFF-ROADING CONTINUED



ABOVE

Tracks near the Mojave Road signify that route's popularity with 4WD off-roaders

PHOTO BY D. A. DEMEO

In the Mojave National Preserve and Death Valley National Park, the National Park Service allows thousands of miles of challenging four-wheel-drive routes and camping options. Joshua Tree National Park also offers routes, but without camping. Within all these park units, four-wheel-drive vehicles must stay on the designated routes; ATV use is prohibited in order to protect the fragile desert. Check with published sources or stop by the park visitors' center to learn more.

The Southern California Timing Association is the granddaddy of organized off-road racing in the California desert. Its member clubs have been pursuing "land speed racing" on the El Mirage dry lake bed for more than 50 years. Working together with the Friends of El Mirage, the SCTA-BNI hosts cleanups, inspects the dry lake bed for damage, cooperates with the BLM, and serves as a role model for other users.

As with all human exploits, off-roading includes a small percentage of people who push the limits of reasonable behavior. Irresponsible and lawless riding has prompted the passage of several regulations to curb noise, litter, and accidents, and protect private property. All riders need to be aware of these laws, which are routinely listed in agency publications and web sites. Classes and printed materials are available for new and old riders alike. "A Guide to California Off-Road Adventures," a brochure published by the Off-Highway Motor Vehicle Recreation Division of California State Parks, summarizes the rules, and maps the key facilities for OHV statewide. For more information, contact local user groups or OHV dealers throughout southern California.

Responsible riding will help maintain access to routes; irresponsible riding will likely result in closures. Responsible riding includes adherence to the voluntary program called Tread Lightly, which includes five key points:

- Travel and recreate with minimum impact
- Respect the environment and the rights of others
- Educate yourself plan and prepare before you go
- Allow for future use of the outdoors, by leaving it better than you found it
- Discover the rewards of responsible recreation

Following these guidelines will not detract from an enjoyable ride. Good riders pull over and stop their engine if they encounter hikers or equestrian riders on a multiple-use route. In areas of the desert that are identified as Critical Habitat, responsible riders watch out for the slow moving desert tortoise and keep their distance. Respectful riders use a propylene-glycol-based antifreeze/coolant in their touring and recreation vehicles, leading to minimal impacts on both the wildlife and the environment, in the case of a leak. As the BLM literature states, "Please help... protect our desert wildlife, and their fragile desert environment."

Books and Online Resources for Off-Roaders can be found at http://www.npca.org/desert_recreation/off_roadings.pdf and on pages 55 of this report.



LEFT

ATV rider at Imperial Sand Dunes

BLM/PHOTO BY KEVIN MARTY

BELOW LEFT

Family camping near El Mirage Dry Lake

PHOTO BY D.A. DEMEO

BELOW RIGHT

Off-roaders pause to explore area
near Dale Mining District

PHOTO BY MARC LACLAIR

http://www.npca.org/desert_recreation/off_roadng.pdf





BOATING



ABOVE

Marina at Moabi Regional Park in Needles, CA

PHOTO BY D. A. DEMEO

RIGHT

Colorado River boating can be a tranquil experience

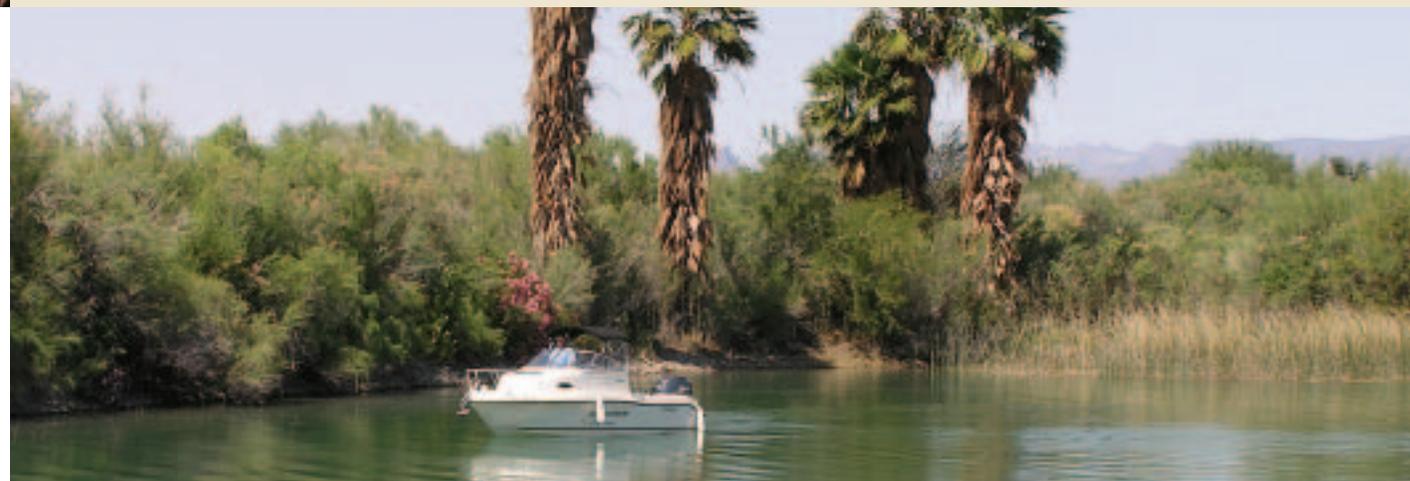
PHOTO BY D. A. DEMEO

In 2005, when uncommonly abundant rains filled the Badwater area, kayaks paddled below sea level in Death Valley National Park for the first time in recent memory. Of course, most boaters would like a more reliable outlet for their sport — and they have it in the desert. Almost year round, southern Californians tow their motorboats to one of several inland bodies of water that offer a launch ramp. “The River” draws so many weekenders because it offers abundant sites for groups of people to camp, BBQ, swim, Jet Ski, and water ski all from one location. At county facilities like Moabi Regional Park on the Colorado River, you can rent canoes, kayaks, and boats, and gain access to a boat launch. Much of the activity along the Colorado River is found on the Arizona side, but there are many sites on the California side, such as BLM campgrounds south of Parker Dam, the Riviera Blythe Marina Park, McIntyre Park, Palo Verde Park and Goose Flats near Blythe, and Imperial Dam Long Term Visitor Area near the Imperial National Wildlife Refuge.

Boaters may also maneuver their craft into the fascinating Cibola or Sunny Bono National Wildlife Refuges to catch a sight of a rare, migrating bird. The 35-mile long Salton Sea is a beautiful, underutilized asset, and the focus of several restoration projects. Summer temperatures make this destination a better choice from October to May; the east side of the sea is better developed for recreation than the west side. Smaller sloops and catamarans often skim its surface, but motorboats are a more common sight.

Despite the mild weather and calm waters of the desert, boater safety is still critical. Responsible boaters respect the wildlife that live in the marshes at the water’s edge by not disturbing them with excess noise and waves. Boaters should naturally avoid polluting the waterways and become better educated on more efficient engines and fuels.

Books and Online Resources for Boating can be found at http://www.npca.org/desert_recreation/boating.pdf and on page 56 of this report.



PERSONAL PROFILE

Steve Bier

CALIFORNIA STATE PARKS RANGER

Ranger Steve Bier of California's Department of Parks and Recreation oversees the Salton Sea State Recreation Area. Since being transferred from the Ocotillo Wells Vehicle Recreation Area a year ago, he's come to appreciate the refreshing sea breezes of his new assignment. Steve is eager to tell people about the advantages of boating and fishing on the Sea. The park offers a nice area to launch boats, and a visitor center with interpretive displays. Steve can give first-hand accounts of the fun that families have on the water and at the semi-shaded picnic shelters at the water's edge. The unhurried pace is reminiscent of the California beach culture before it became so commercialized. Yes, the algae can bloom unpredictably, and there may be the occasional smell from the release of Hydrogen sulfide that builds up on the lake's bottom, but the Sea is not polluted and it's a really fun place to explore. It's a resource that more desert residents in the Coachella Valley could appreciate by taking a short drive in the direction of the date farms and date shakes at the north end of the Sea.



http://www.npca.org/desert_recreation/boating.pdf



ABOVE

Devil's Elbow in Havasu National Wildlife Refuge

PHOTO BY TONY RILEY

FAR LEFT

California State Parks Ranger Bier

PHOTO BY D. A. DEMEO

LEFT

Sheltered picnic station at Salton Sea State Recreation Area

PHOTO BY D. A. DEMEO



FLIGHT



ABOVE

Expert pilot Van Micheal Pray enjoys desert landscapes from the air

PHOTO BY D. A. DEMEO

RIGHT

Tandem jumps allow beginners to safely experience free fall

PHOTO BY KEITH LAKE

Look up! There's plenty of activity in the skies over the California desert. Although much of the traffic comes from commercial, military, and space flight, recreational flights thrive on the desert winds and topography. Southern California has a long history with flight, and the desert has been the proving ground for many exciting developments. It's the place that launched several world records, including the 49,000' altitude achieved by sailplane pilot Bob Harris as he flew over Mt. Whitney in 1986.

Recreational flight in the desert typically includes the piloting of traditional planes, private jets, and sailplanes, stunt flying, skydiving, and flying experimental craft such as ultralights and sailplanes. Hot-air balloon touring and hand gliding are pursued as well, but are not as common. Several desert airports are found on public lands, hosting recreational flyers and providing hubs of activity for clubs and individuals. In addition, flight related events may be scheduled on BLM lands, with a permit. Although learning to fly and operating a single- or twin-

engine airplane can be quite costly, activities like soaring, skydiving, and piloting ultralights are far less expensive.

Flying for pleasure in the desert has as much to do with the amenities at the destination as it does with the accomplishments entered in the pilot's log. The Agua Caliente Airstrip, owned by San Diego County, is a favorite landing spot because it's an easy walk to Agua Caliente Hot Springs County Park, open from Labor Day to Memorial Day. The park has picnic tables, hiking, campsites, and two geothermally heated pools (hot springs). Acacias, willows, palms and mesquite define the lush landscaping.

California City Municipal Airport is the home to fixed-wing, skydiving and sailplane operations. For suggestions on other public airports in the desert, consult the resources section.

Books and Online Resources for Flight can be found at http://www.npca.org/desert_recreation/flight.pdf and on page 57 of this report.





FAR LEFT

Tim Bennicoff is suited up and ready for his next jump

PHOTO BY D. A. DEMEO

LEFT

Cindy Brickner and her Carolee Soaring partners pause near their fleet

PHOTO BY D. A. DEMEO

http://www.npca.org/desert_recreation/flight.pdf

PERSONAL PROFILE

Tim Bennicoff

ENGINEER

A skydiver since 1993, Tim Bennicoff is a true-blooded “jumpbones.” In his real life, he’s a methodical engineer for a military contractor. On the weekends, he heads to Skydive California City — a drop zone and social club serving adventurers for over 45 years. He joins his friends at a height of 12,500 feet above ground level (AGL) and “shows silk” at about 2,200 feet AGL. On the way down, he might do some “relative work” and create 4-way or 8-way formations with others on the jump.

Sure, the activity attracts high-energy people who like to have outdoor fun — for a beginner, it’s all about the thrill of the adrenaline rush. But, as you get hundreds of jumps under your belt, it’s also about the weightless serenity you achieve during free fall, and the opportunity to escape the pressures of everyday life.

Surprisingly, the cost of each freefall isn’t as expensive as you might imagine. Once you invest \$3,000-\$4,000 in a “rig,” the main and reserve ram air parachutes, and automatic opener, each jump costs about \$25. At the onset, a 40-minute class can prepare you for a tandem jump, or an eight-hour class can set you up for an accelerated freefall.

Responsible skydiving includes using the directional control of the parachute to keep close to the landing zone, and maintaining a deep sense of cooperation with your fellow jumpers. For the operator, it includes striving for fuel efficiency and flying over non-residential areas for the dozen or more ascents made each day.

PERSONAL PROFILE

Cindy Brickner

FLIGHT INSTRUCTOR AND BUSINESSWOMAN

Cindy Brickner started her love of flying at 17 years old, working as a waitress in a local desert airport. In her 30 years of soaring, she’s been the director of a national sailplane organization, a flight instructor, and the owner of Caracole Soaring. She refers to this challenging activity as “an aerial form of hiking that is less stressful on the environment.” Getting airborne typically only requires 10–15 minutes of support from a tow plane or ground winch, but it’s followed by 2–7 hours of flight that produces no fuel emissions or intrusive sounds. A “boomer” lift from the thermal currents over a dry lake, the desert dirt devils, or the mountain wave currents can sustain lengthy flights of 600 miles as high as 30,000 feet.

People drawn to fly sailplanes are usually strongly motivated and driven by the desire for a more natural experience. They often dream of flight and hope to fly self-propelled, like a bird. A beginner can best get started by going through a club or school to earn a license. The cost and time involved in training are similar to motorized flight, but the pursuit of the hobby costs much less. Once in the air, the views are astounding. Glider pilots frequently marvel at the beauty of nature they encounter during all seasons of the year.



STARGAZING



Serious amateurs refer to their nightly scientific pursuits as ‘astronomy,’ but the occasional visitor to the desert will simply call it stargazing. Casual stargazers may not be acquainted with the latest scientific theories or stellar discoveries, but they can achieve a sense of accomplishment by simply learning the names of the most prominent constellations. Although it may come as a surprise, many first-time visitors have no idea what the Milky Way looks like—it disappeared from their view long ago, as the urban landscape was overcome by the light pollution that obscures everything but the brightest stars, planets and moon. The desert, with its cloudless nights and limited development, is still within reach of the stars. So valuable is this natural resource that many local ordinances have been passed to protect it.

If you own a telescope, some of the best places to observe the night sky are the more remote areas of national parks like Joshua Tree and Death Valley, and Mojave National Preserve. In Joshua Tree, Cottonwood and Hidden Valley campgrounds are popular places for stargazers. Near the Mojave National Preserve, Devil’s Playground is well-known

as a really dark place with great visibility. Newcomers often find the best introduction is through one of the many regularly scheduled star parties hosted by the desert astronomical societies (listed in the Online Resources). These clubs own sophisticated telescopes and cameras that can capture planets, nebulae, or galaxies. Their members contain a wealth of knowledge, and often provide telescope workshops or host lectures by famous astronomers for free or a nominal fee. When you go, bring a folding chair, a flashlight with a red lens, and a star chart. The views are mesmerizing, so be prepared to stay up late into the evening.

To visit a desert observatory or planetarium, check out the Copper Mountain Observatory (<http://www.coppermountainobservatory.org/>), the Lewis Center for Educational Research (<http://www.lewiscenter.org/index.php>), or the S.A.G.E. Planetarium (<http://www.psd.k12.ca.us/planetarium/index.htm>).

Books and Online Resources for Stargazing can be found at http://www.npca.org/desert_recreation/stargazing.pdf and on page 58 of this report.

ABOVE

Hale-Bopp Comet over Yucca Valley, CA

PHOTO BY WALLY PACHOLKA / ASTROPICS.COM

RIGHT

Sam Davidson and Peter Bertain at Andromeda Society star party

PHOTO BY ORVILLE E. HUNTER

FAR RIGHT

Wally Pacholka silhouetted against night sky

PHOTO BY WALLY PACHOLKA / ASTROPICS.COM





FAR LEFT

Spitzer Space Telescope captures center of Milky Way

PHOTO COURTESY OF NASA

LEFT

Milky Way over Hidden Valley, Joshua Tree National Park

PHOTO BY WALLY PACHOLKA / ASTROPICS.COM

http://www.npca.org/desert_recreation/stargazing.pdf

PERSONAL PROFILE

Wally Pacholka

CELESTIAL EVENT PHOTOGRAPHER

Wally Pacholka (<http://www.astropics.com>) has done much to promote stargazing in the California desert. His breath-taking photographs of the night sky, shot mostly at Indian Cove campground in Joshua Tree National Park, have been widely acclaimed, and posted on NASA's web site. He won TIME Magazine's Picture of Year and Life Magazine's Picture of Year honors in 2003. Wally was drawn to astronomy as a child growing up in Canada and he joined the Montreal Royal Astronomical Society of Canada astronomy club at age 13.

Wally's career has been in the world of finance, but his newest endeavors include marketing his artistic images and speaking on behalf of night sky preservation. "God just gave me a gift," Wally told the L.A. Times in an article published in 2001. "I get to see things in the sky that the average person doesn't see. I think that what's out there is God's creation, meant for our enjoyment." Thanks to Wally, many urbanites who may not get to the desert have been exposed to the beauty of a shooting star.

PERSONAL PROFILE

Sam Davidson

ANDROMEDA SOCIETY ASTRONOMER

Sam Davidson is the Jerry Seinfeld of desert "star parties." He has a repertoire of astronomical one-liners that can fill the spaces between intermittent sightings of meteors on a cold night. More importantly, he has a vast knowledge of celestial statistics and readily shares them with newcomers. He came to astronomy as an adult after relocating from a large city and seeing the features of the night sky for the first time. Sam likes to point out that stargazing is a quiet activity with no artificial lighting to disturb the environment. He encourages novices to consult with more seasoned astronomers and read magazines like *Sky and Telescope* before investing in any equipment. On a more somber note, he'd like to let people know that a rapid increase in light pollution in the desert is encroaching on our ability to appreciate the celestial wonders.



CULTURAL RECREATION



ABOVE
Joshua Tree National Park ranger explains mining operations

PHOTO BY HOWARD GROSS

Much of the outdoor recreation in the desert involves the pursuit of a specific sport or hobby. But a significant part of experiencing the desert also includes tours to cultural destinations made more accessible by the preservation and interpretive efforts of the National Park Service. No other agency devotes the time and attention to cultural archiving and restoration that the NPS does. NPS operates in conjunction with local tribes and the California Office of Historic Preservation to offer accurate and complete recreations.

For the purposes of this report, we highlight some of the most significant public destinations as they relate to California history. Included are sites that relate to Native American culture, railroads, mining, ranching and ghost towns, aerospace, cultural lore, and monuments to civil engineering. Although our listing is not comprehensive, it is representative; all sites are accessible either by appointment or open schedule.

CULTURAL RECREATION SITES ACROSS THE DESERT

The **Goldstone Satellites** are unique radio telescopes that capture images from the deepest parts of space. (<http://deepspace.jpl.nasa.gov/dsn/features/goldstonetours.html>)

Manzanar National Historic Site documents the tragic period during WWII when U.S. citizens of Japanese descent were interned. (<http://www.nps.gov/manz/>)

Calico Ghost Town features cowboys and a functioning train. (<http://www.calicotown.com>)

The Butterfield Stage Stop gave rest to travelers crossing the Imperial County desert by stagecoach. (<http://www.imperialcounty.com/phototur/photo20.htm>)

Agua Caliente Cultural Museum celebrates the cultural heritage of various Native American tribes that lived in the desert. (<http://www.accmuseum.org>)

Antelope Valley Indian Museum features Indian artists, demonstrations, and special activities for children. (http://www.parks.ca.gov/default.asp?page_id=632)

Parker Dam features a functioning power plant on the Colorado River plus historic details. (http://www.desertusa.com/colorado/parker_dam/du_parkerdam.html)

Trona Pinnacles, renowned for its otherworldly features, has been a site for many film productions. (http://www.desertusa.com/Thingstodo/ttdtrails/du_ttd_trona.html)

Fort Edwards Shuttle Launch and Museum is the site of many shuttle landings, an annual air show and the AFFTC Museum. (<http://www.edwards.af.mil/trip>)

Civilian Aerospace Test Center and Historic Airplane Site has one of the largest “airplane graveyards” in the world. (<http://www.mojaveairport.com>)

Oasis of Murals in Twentynine Palms is part of a desert tradition of outdoor art. (<http://www.oasisofmurals.com>)

The **Desert Studies Center at Zzyzx** hosts a variety of general interest educational programs and events. (<http://biology.fullerton.edu/facilities/dsc/zzyzx.html>)

The **Lost Desert Gold Mine** is one of the many well-preserved mines in the California Desert. (<http://www.ghosttownexplorers.org/california/lpt/lpt.htm> and <http://www.geocities.com/williamacarr/LostMine.html>)

Books and Online Resources for Cultural Recreation can be found at http://www.npca.org/desert_recreation/cultural.pdf and on page 59 of this report.

PERSONAL PROFILE

Shirley Harding

RETIRED MUSEUM CURATOR, NATIONAL PARK SERVICE

Shirley Harding lived in Death Valley for 22 years, a fact that reflects her love of the area, but even more significantly, her desire to maintain the continuity of its history. From Scotty's Castle, which she's dubbed a "country cousin to Hearst Castle," to the old mining remnants found along the hike to Zabriskie Point and Golden Canyon, Death Valley National Park offers a wealth of meaningful artifacts. Visitors must leave these artifacts where they lie, to preserve the experience of the next person. Shirley gives the example of rocks that have disappeared from the "racetrack" and notes that visitors must resist the urge to collect.

Though she is retired from her career as a museum curator for the National Park Service, Shirley still volunteers six months out of the year. Charles Hillinger, the famous L.A. Times journalist and author, profiled Shirley in 1991 and photographed her holding a Chinese teapot unearthed at Harmony Borax. This cultural juxtaposition is symbolic of what you'll find throughout the California deserts.



http://www.npca.org/desert_recreation/cultural.pdf



ABOVE

Kelso Depot and Visitor's Center
in Mojave National Preserve

PHOTO BY D.A. DEMEO

FAR LEFT

Shirley Harding volunteering at
Death Valley National Park

PHOTO BY MARY ANN MCNEILL

LEFT

Petroglyphs reveal hunting
tradition of native cultures

PHOTO BY TONY RILEY

CHALLENGES

PUBLIC AWARENESS OF RECREATIONAL AMENITIES

THE CHALLENGE IS TO BROADEN PUBLIC AWARENESS AND STIMULATE HEALTHY OUTDOOR EXERCISE AMONG URBANITES AND DESERT DWELLERS ALIKE.

As this guidebook outlines, public lands and outdoor pursuits enjoyed in the California Desert bring enormous benefit to the region, but one of the challenges facing urban residents is the lack of information available about the diversity of desert recreation. Although the desert offers a wide range of motorized and non-motorized adventures, the availability of these options remains a well-kept secret; users tend to gravitate toward the heavily advertised forms of motorized recreation.

It's an indirect consequence of one of the greatest challenges facing the public lands, including the national parks: funding shortfalls. The lack of funding hampers the ability of land managers and recreation planners to get the word out about the variety of opportunities available. Consequently, visitors know only about the most heavily used areas, such as the Glamis Dunes.

In addition, agency budgets have resulted in limited availability of detailed information on such outdoor pursuits as rock climbing, horseback riding, and bicycling. Tourists would benefit from access to detailed brochures at the California Welcome Centers, college recreational clubs, and urban community centers. Promotion of all the recreational amenities on desert public lands could lead to a more balanced use of facilities.

Other consequences of funding shortfalls include reduced hours of operation at important visitor facilities, a lack of exhibit space and curatorial support for museum collections, closed trails or roadways, and a lack of picnic areas and interpretive signs.

SHORTFALLS IN FUNDING HAVE LED TO A DECLINE IN VISITOR SERVICES

THE CHALLENGE IS TO RESTORE PUBLIC FUNDING TO RECREATIONAL INFRASTRUCTURE AND IMPROVE VISITOR SERVICES.

Our public lands need a consistent source of funding that matches visitor demand and the need for resource management. Daily use fees help fund public lands, but must be kept at a reasonable level that ensures access is affordable to all Americans, regardless of income. Though government funds should remain the most substantive portion of any public land-management budget, the growing reliance on private donations and increased user fees is troubling.

RAPID POPULATION GROWTH THREATENS TO OVERWHELM RESOURCES

THE CHALLENGE IS TO ACHIEVE REGIONAL PLANNING AND COORDINATION THAT MEET THE FUTURE RECREATIONAL NEEDS WITHOUT COMPROMISING NATURAL AND CULTURAL RESOURCES.

As the population of the Greater Los Angeles Area, San Diego, and Imperial Counties surpasses 20 million, development near national park lands directly threatens precious resources and cultural treasures. Resources are



ABOVE

Resource protection is a concern at OHV recreation areas

PHOTO BY D. A. DEMEO

strained by increased use and the negative impacts of adjacent development on water and air quality. Growth is expected to increase the demand for recreational opportunities on public lands as well.

Evidence of the growth is already apparent. Recreational facilities at many public sites in the desert are at their maximum saturation on weekends. Trash and noise interfere with the visitor experience. Staffing levels are inadequate to answer visitor questions, enforce regulations or educate visitors on the principles of Leave No Trace and Tread Lightly.



CONCLUSIONS

DESERT LANDS ARE OPEN TO A WIDE VARIETY OF RECREATION

As this report demonstrates, there are many adventurous and fulfilling ways to recreate in the desert. Proper planning has resulted in a balance of public land uses that serve both motorized and non-motorized hobbies. Rather than keeping people from enjoying the desert, the California Desert Protection Act has reserved spaces of beauty, tranquility, and recreational opportunities that might have been lost had protection not been adopted.

The desert national parks are particularly well suited to non-motorized recreation such as hiking, camping, equestrian riding, biking, stargazing, rock climbing, birding, orienteering, caving, and cultural sightseeing. BLM and California State lands supplement this mission by offering outlets for motorized and non-motorized recreation on land and water. Other government agencies increase recreational access through specialized facilities located closer to population centers.

RIGHT

Antelope Valley California Poppy Reserve

AP PHOTO/PHOTO BY DAMIAN DOVARGANES

As urban centers continue to grow, proper planning and responsible use will ensure balanced use of public land in the desert. Both motorized and non-motorized recreation can be pursued without any single use overwhelming or encroaching upon another. Resources can be properly allocated and conserved by the integrated planning of all land management agencies on a regional level.

Ongoing investment in all these treasured places is required to preserve them for present and future generations. Without adequate funding, facilities fall into

decline, users become frustrated, and recreational planners are unable to maintain balanced access to public lands.

Research has demonstrated that the National Park Service suffers from an operating shortfall in excess of \$600 million annually. Each year that the parks are under-funded, NPS managers must make difficult choices regarding the level of visitor services and recreational options they can offer the public. The solution is not to open the national parks to commercialization, but to align federal budgets with the needs and desires of the American public.



BOOKS AND ONLINE RECREATIONAL RESOURCES

ACCESS AND FACILITIES

SUGGESTED BOOKS:

California's Route 66, Vivian Davies and Darin Kuna, The California Historic Route 66 Association, 1993

Desert Sense: Camping, Hiking and Biking in Hot, Dry Climates, Bruce Grubbs, Mountaineers Books, 2005

Foghorn Outdoors California Camping: The Complete Guide to More Than 1,500 Tent and RV Campgrounds, Tom Stienstra, Avalon Travel Publishing, 2005

Mojave Desert Windshield Adventures, 2nd edition, Russell & Kathlynn Spencer, self-published, 2005

Mojave Road Guide, Dennis Casebier, Friends of the Mojave Road, 1986

The Ultimate Desert Handbook: A Manual for Desert Hikers, Campers and Travelers, Mark Johnson, Ragged Mountain Press, 2003

WEB SITES:

Automobile Association of America (<http://www.aaa.com>)

America's Byways (<http://www.byways.org>)

California State Tourism, Outdoor Recreation

(<http://www.californiarecreation.com>)

Death Valley National Park hotel rooms

(<http://www.furnacecreekresort.com> and <http://www.stovepipewells.com>)

Desert Managers Group (<http://www.californiadesert.gov/index.php>)

Public Lands Information Center (<http://www.publiclands.org>)

Recreation One-Stop (<http://www.recreation.gov>)

Recreational Vehicle Journal (<http://www.rvjjournal.com>)

Roadside America (<http://www.roadsideamerica.com>)

Tom Harrison Recreation Maps (<http://www.tomharrisonmaps.com>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

HIKING & BACKPACKING

SUGGESTED BOOKS:

Adventuring in the California Desert, Lynne Foster, Sierra Club Books, 1987

California's Wilderness Areas: The Complete Guide: Volume 2, The Deserts, George Wuerthner, Westcliffe Publishers, 1998

BLM Wilderness Areas National Parks and Preserve Maps and Information: California, Bureau of Land Management, 1994

The Explorer's Guide to Death Valley National Park, T. Scott Bryan and Betty Tucker-Bryan, University Press of Colorado, 1995

On Foot in Joshua Tree National Park: A Comprehensive Hiking Guide, Patty A. Furbush, M.I. Adventure Publications, 2001

WEB SITES:

American Hiking Society (<http://www.americanhiking.org>)

Antelope Valley Poppy Reserve (http://www.parks.ca.gov/default.asp?page_id=627)

Anza-Borrego State Park (<http://www.anzaborrego.statepark.org>)

California Riding and Hiking Trail (<http://www.elcr.org/default.aspx?tabid=58>)

California Wilderness Coalition (<http://www.calwild.org>)

Desert USA (http://www.desertusa.com/Thingstodo/du_ttd_hike.html)

Digital trails & maps (subscription-based) (<http://www.trails.com>)

Hiker Central (<http://www.hikercentral.com/regions/us/california.html>)

Juan Bautista de Anza National Historic Trail (<http://www.nps.gov/juba>)

National Center on Accessibility (<http://www.ncaonline.org/>)

National Natural Landmarks (http://www.nature.nps.gov/nl/registry/usa_map/states/california/california.cfm)

Old Spanish National Historic Trail (<http://www.nps.gov/olsp/>)

Pacific Crest Trail (<http://www.pcta.org> and <http://www.fs.fed.us/pct>)

Palm Oases, listed (<http://www.desertusa.com/mag99/may/stories/fanpalms.html>)

Wilderness Institute (<http://www.wilderness.net>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

WILDLIFE VIEWING & BIRDING

SUGGESTED BOOKS:

A Birder's Guide to Southern California, Brad Schram, American Birding Association, 1998

Wildlife Viewing Guide of California, Jeanne L. Clark, Falcon Publishing Company, 1996

Mojave Desert Wildflowers: A Field Guide to Wildflowers, Trees, and Shrubs of the Mojave Desert, Including the Mojave National Preserve, Death Valley National Park, and Joshua Tree National Park, Pam MacKay, Falcon Press, 2003

WEB SITES:

American Birding Association (<http://www.americanbirding.org>)

Audubon California (<http://www.audubon-ca.org>)

Anza Borrego Foundation (<http://theabf.org>)

California Art Club (<http://www.californiaartclub.com>)

California Nature Photographers (<http://nocal.naturephotographers.net>)

California Watchable Wildlife (<http://www.cawatchablewildlife.org>)

Desert Tortoise Natural Area (<http://www.tortoise-tracks.org/dtna.html>)

Desert USA Wildlife Viewing (http://www.desertusa.com/Thingstodo/du_ttd_wild.html)

Sierra Club, California branch (<http://www.sierraclub.org/ca>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

ROCK CLIMBING & BOULDERING

SUGGESTED BOOKS:

Rock Climbing Joshua Tree, Randy Vogel, Falcon Press, 2000

Joshua Tree Bouldering, Mari Gingery, Quail Springs Publishing, 2000

The Trad Guide to Joshua Tree: 60 Favorite Climbs from 5.5 to 5.9, Charlie and Diane Winger, Colorado Mountain Club Press, 2004

A Complete Bouldering Guide to Joshua Tree National Park, Robert Miramontes, K. Daniels and Associates, 2003

WEB SITES:

Climbing Joshua Tree (<http://www.climbingjtree.com>)

Friends of Joshua Tree (<http://www.friendsofjosh.org>)

Joshua Tree Climb (<http://www.joshuatreeclimb.com>)

Joshua Tree Rock Climbing School (<http://www.joshuatreerockclimbing.com>)

Joshua Tree Outfitters (<http://www.joshuatreeoutfitters.com>)

Nomad Ventures (<http://www.joshuatreevillage.com/515/515.htm>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

CAVING

SUGGESTED BOOK:

Adventure of Caving, David R. McClurg, National Speleological Society, 1996

WEB SITES:

Southern California Grotto (<http://www.mindspring.com/~bszukalski/socalgrotto/socalgrotto.html>)

National Speleological Society (<http://www.caves.org>)

ORIENTEERING

SUGGESTED BOOKS:

Orienteering: The Sport of Navigating with Map and Compass, Steven Boga, Stackpole Books, 1997

Land Navigation Handbook: The Sierra Club Guide to Map and Compass, W.S. Kals, Sierra Club, 1983

The Geocaching™ Handbook, Layne Cameron, Falcon Guide, 2004

GPS for Dummies, Joel McNamara, Wiley Publishing, 2004

WEB SITES:

Buxley's Geocaching Waypoint (<http://www.brillig.com/geocaching>)

Coachella Valley Hiking Club (<http://www.cvhikingclub.net>)

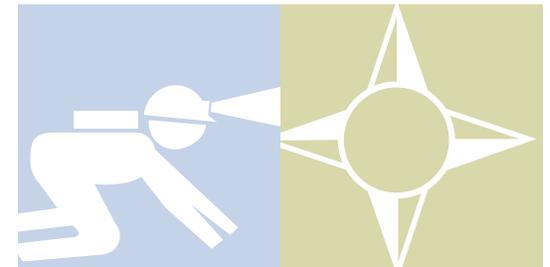
Geocaching with Navicache (<http://www.navicache.com>)

International Orienteering Federation (<http://www.orienteeering.org>)

Joshua Tree National Park Association Desert Institute (<http://www.joshuatree.org/dihome.html>)

National Association for Search and Rescue (<http://www.nasar.org/nasar>)

U.S. Orienteering Federation (<http://www.us.orienteeering.org/>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

ROCK HOUNDING & GEMOLOGY

SUGGESTED BOOKS:

Gem Trails of Southern California, 2nd ed., James R. Mitchell, Gem Guides Book Co., 2003

Desert Gem Trails, Mary Frances Strong, Gem Guides Book Co., 1966

National Audubon Society Field Guide to North American Rocks and Minerals, Charles Wesley Chesterman, Knopf, 1979

Simon & Schuster's Guide to Rocks and Minerals, Fireside Books, 1978

WEB SITES:

Bob's Rock Shop (<http://www.rockhounds.com>)

High Desert Insider's Rock Club Listing (<http://www.highdesertinsider.com/html/rockhunting.html>)

Mineral and Gemstone Kingdom (<http://www.minerals.net>)

Mineralogical Society of Southern California (<http://www.mineralsocal.org>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

HUNTING & FISHING

SUGGESTED BOOKS:

Outdoor California is “the state’s official California fish, wildlife and habitat magazine.”

Guide To Hunting Quail In California, Sönke Mastrup, updated by D. Sam Blankenship & Jesse Garcia, State Of California Resources Agency, Department of Fish and Game, 2002

The Definitive Guide to Fishing in Southern California, Chris Shaffer, Shafdog Publications, 2001

Fishing in Southern California: The Complete Guide, 8th ed., Ken Albert, MarketScope Hourglass Books, 2001

WEB SITES:

BLM Hunting Tips (<http://www.blm.gov/ca/caso/hunting.html>)

California Department of Fish and Game (<http://www.dfg.ca.gov>)

California Fish and Game Regulations (<http://www.fgc.ca.gov/html/regs.html>)

California Hunter Education Program (<http://www.dfg.ca.gov/huntered/index.html>)

Discover the Outdoors, Chukar Hunting (<http://www.dto.com/hunting/article.jsp?articleid=642>)

Ducks Unlimited (<http://www.ducks.org>)

Green Wings (<http://www.caducks.org/greenwings.html>)

High Desert Hunt Club (<http://www.highdeserthunt.com>)

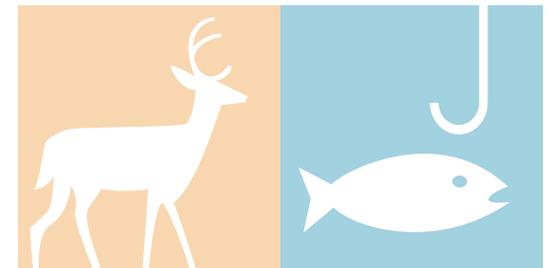
Mule Deer Foundation (<http://www.muledeer.org>)

National Archery in the Schools (<http://www.nasparchery.com>)

National Wild Turkey Federation (<http://www.nwtf.org>)

Quail Unlimited (<http://www.qu.org>)

Youth in the Outdoors (<http://www.dfg.ca.gov/yo/index.html>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

BIKING

SUGGESTED BOOKS:

Mountain Biking: Southern California's Best 100 Trails, Edited by Delaine Fragnoli and Don Douglass, Mountain Biking Press/Fine Edge Productions, 1998

Mountain Bike! Southern California, David Story, Laurie and Chris Leman, Menasha Ridge Press, 2001

WEB SITES:

American Bicycle Association (<http://www.ababmx.com>)

Bicycling Magazine (<http://www.bicycling.com>)

Death Valley Century and Double Century (<http://www.adventurecorps.com/deathvalley/index.html>)

Desert Bicycle Club (<http://www.cycleclub.com>)

Hesperia Live Oak BMX Park (<http://www.hesperiaparks.com/bmx.php>)

International Mountain Biking Association (<http://www.imba.com>)

Tour de Palm Springs (<http://www.tourdepalm springs.com>)

LANDSAILING

SUGGESTED BOOK:

Landsailing, Scott Robert Hays, Capstone Press, 1992

WEB SITES:

BloKarts (<http://www.blokart.com>)

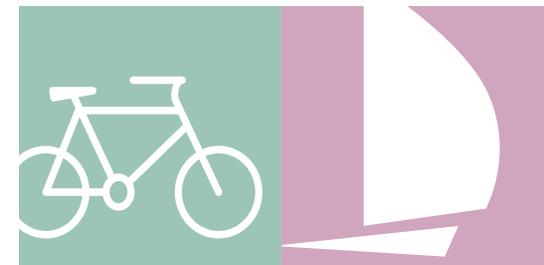
North American Land Sailing Association (<http://www.nalsa.org>)

SASSASS Sailing Club (<http://www.footeprint.com/sailingweb/sassass.htm>)

WindJet — A world-record-holding landsailer (http://www.windjet.co.uk/index.php?option=com_frontpage&Itemid=1)

WindPower Sports (<http://windpowersports.com/landsailers>)

Wind Wheels: The Online Landsailing Journal (http://www.sevenravens.com/landsailing/Windwheels_page1.html)



BOOKS AND ONLINE RECREATIONAL RESOURCES

HORSEBACK RIDING

SUGGESTED BOOK:

Saddleback Sightseeing in California: A Guide to Rental Horses, Trail Rides and Guest Ranches, John A. Greenwald, Gem Guides Book Co, 1992

WEB SITES:

BLM National Wild Horse and Burro Program (<http://www.doi.gov/horse>)

California Riding Magazine (<http://www.ridingmagazine.com>)

East Mojave Scenic Ride (<http://www.endurance.net/rides/2004EastMohave>)

Jack Auchterlonie Memorial Equine Sanctuary (<http://www.jamesrescue.com/>)

Mojave River Narrows Park (<http://www.co.san-bernardino.ca.us/parks/mojave.htm>)

Southern California Equestrian Directory (http://www.socalequine.com/socal_club_house.htm)

Private ranches and horse stables near Anza-Borrego State Park can be found at: (<http://www.borregosprings.org/outdoors.html>)

General site to consult on horse and mule trails/facilities (<http://www.horseandmuletrails.com/Ca.htm>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

OHV / OFF-ROADING

SUGGESTED BOOKS:

Southern California SUV Trails: Volume I, The Western Mojave Desert, Roger and Loris Mitchell, Track and Trail Publications, 2004

Death Valley SUV Trails: A Guide to 46 Interesting Four-Wheeling Excursions in the Death Valley Country, Roger Mitchell, Track and Trail Publications, 2001

Guide to Southern California Backroads and 4-Wheel Drive Trails: Easy, Moderate, Difficult Backcountry Driving Adventures, Charles A. Wells, Funtreks Inc., 2003

Benchmark California Road and Recreation Atlas, Stuart Allan, Benchmark Maps, 2005

WEB SITES:

Air Resources Board Emission Regulations for OHV (<http://www.arb.ca.gov/msprog/offroad/ofhwymc.htm?PF=Y>)

American Sand Association, Inc. (<http://www.americansandassociation.org>)

Bureau of Land Management (<http://www.blm.gov/ohv>)

CALIFORNIA'S OHV RIDING AREAS

(http://www.all-offroad.com/DirtBikes/Where2Go/California_Riding_Areas.html)

(<http://www.recreation.gov/offhighway.cfm?myActivity=offhighwayvehicle>)

(<http://www.4x4wire.com/trail/report/ca/parks>)

California State Parks (<http://ohv.parks.ca.gov>)

Friends of El Mirage (<http://www.elmirage.org>)

National Survey on Recreation and the Environment, June 2005 report (http://www.fs.fed.us/recreation/programs/ohv/OHV_final_report.pdf)

THE SOUTHERN CALIFORNIA TIMING ASSOCIATION

(<http://www.scta-bni.org>)

(<http://www.ca.blm.gov/barstow/mirage.html>)

United Desert Gateway (<http://www.uniteddesertgateway.org>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

BOATING

SUGGESTED BOOK:

Colorado River Recreation, 4th edition, Diane Dirksen, Recreation Sales Publishing, 2005

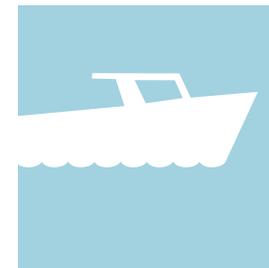
WEB SITES:

COLORADO RIVER BOATING GUIDES FROM CALIFORNIA STATE DEPARTMENT OF BOATING AND WATERWAYS

(<http://dbw.ca.gov/Pubs/BlythetoImperial/BlythetoImperial.pdf>)

(<http://dbw.ca.gov/Pubs/DavistoParker/DavistoParker.pdf>)

Kayaking in the Havasu Wildlife Refuge (<http://www.fws.gov/southwest/refuges/arizona/havasu/kayakingandcanoeing.html>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

FLIGHT

SUGGESTED BOOKS:

Pilot's Guide to California Airports, R. Fouquet, Aviation Book Company, 1993

JUMP!: Skydiving Made Fun and Easy, Tom Buchanan, McGraw-Hill Professional, 2003

Glider Flying Handbook: #FAA-H-8083-13, Edited by Federal Aviation Administration, Aviation Supplies and Academics, Inc., 2004

Cross-country Soaring, Helmut Reichmann, Soaring Society of America, 1993

Ultralight Airmanship: How to Master the Air in an Ultralight, Jack Lambie, Motorbooks International, 1982

Flying Ultralights: Instructional Briefings, Doug Chipman, Aviation Supplies and Academics, 1995

WEB SITES:

Directory of Flight Resources in southern California (<http://www.at-la.com/@la-fly.htm>)

Experimental Aircraft Association at Edwards Air Force Base (<http://www.eaa1000.av.org>)

Orange County Soaring Association (<http://www.ocsoaring.org>)

Soaring Society of America (<http://www.ssa.org>)

Southern California Douglas Soaring Association (<http://www.netmeister.net/~scdsa>)

29 Palms Soaring Club (<http://members.aol.com/mressell/TNPsoaring>)

United States Parachute Association (<http://www.uspa.org>)

U.S. Ultralight Association (<http://www.usua.org>)

A PARTIAL LIST OF PUBLICLY OWNED DESERT AIRPORTS WITH RECREATION:

Airports in the San Bernardino County Airport System (Apple Valley, Baker, Barstow-Daggett, Chino, Needles, Twentynine Palms) (<http://www.co.san-bernardino.ca.us/Airports>)

Jacqueline Cochran Regional Airport, owned by Riverside County (<http://www.rivcoeda.org/html/Aviation/aviationdesert.html>)

Palm Springs International Airport, owned by the City of Palm Springs (<http://www.palmspringsairport.com>)

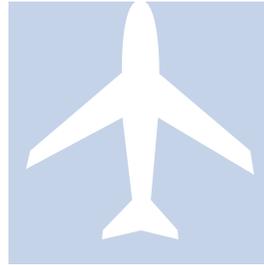
California City Municipal Airport (<http://www.californiacity-ca.us>)

Inyokern Airport (<http://www.inyokernairport.com>)

Palmdale Regional Airport, owned by the City of Los Angeles World Airports (<http://www.lawa.org/welcomeLAWA.html>)

Mojave Airport, part of the East Kern Airport District (<http://www.mojaveairport.com>)

Southern California Logistics Airport (<http://www.logisticsairport.com/index.php>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

STARGAZING

SUGGESTED BOOK:

Astronomy for Dummies, Stephen P. Maran, For Dummies Publishers, 1999

WEB SITES:

Andromeda Society (<http://mysite.verizon.net/res6vljt/index.html>)

Antelope Valley Astronomy Club (<http://www.avastronomyclub.org/>)

Astronomical Society of the Desert (<http://www.astrorx.org/>)

China Lake Astronomical Society (<http://www.l.iwvisp.com/brower/clas.html>)

High Desert Astronomical Society (<http://www.hidasonline.com/>)

NASA JPL Night Sky Network (<http://nightsky.jpl.nasa.gov/>)

Orange County Astronomers Anza Observing Site (http://www.ocastronomers.org/resources/anza_site/)

Riverside Astronomical Society Landers Observing Site (http://www.rivastro.org/ras_landers.html)

Western Region of the Astronomical League (<http://www.astroleague.org/al/regional/west.html>)

LOCATIONS OF DESERT OBSERVATORIES / PLANETARIUMS:

Copper Mountain Observatory (<http://www.coppermountainobservatory.org/>)

Lewis Center for Educational Research (<http://www.lewiscenter.org/index.php>)

The S.A.G.E. Planetarium, Palmdale School District (<http://www.psd.k12.ca.us/planetarium/index.htm>)



BOOKS AND ONLINE RECREATIONAL RESOURCES

CULTURAL RECREATION

SUGGESTED BOOKS:

Mining History and Geology of Joshua Tree National Park, Edited by Margaret R. Eggers, San Diego Association of Geologists, 2004

Mines of the High Desert, Ronald Dean Miller, La Siesta Press, 1972

WEB SITES:

Harmony Borax Works (<http://www2.nature.nps.gov/geology/usgsnps/deva/ftthar1.html>)

Scotty's Castle (<http://www.nps.gov/deva/scottys1.htm>)

Petroglyphs (<http://www.petroglyphs.us/>)

CULTURAL RECREATION SITES ACROSS THE DESERT:

Goldstone Satellites (<http://deepspace.jpl.nasa.gov/dsn/features/goldstonetours.html>)

Manzanar National Historic Site (<http://www.nps.gov/manz/>)

Calico Ghost Town (<http://www.calicotown.com>)

Butterfield Stage Stop (<http://www.imperialcounty.com/phototur/photo20.htm>)

Agua Caliente Cultural Museum (<http://www.accmuseum.org>)

Antelope Valley Indian Museum (http://www.parks.ca.gov/default.asp?page_id=632)

Parker Dam (http://www.desertusa.com/colorado/parker_dam/du_parkerdam.html)

Trona Pinnacles (http://www.desertusa.com/Thingstodo/ttdtrails/du_ttd_trona.html)

Fort Edwards Shuttle Launch and Museum (<http://www.edwards.af.mil/trip>)

Civilian Aerospace Test Center and Historic Airplane Site (<http://www.mojaveairport.com>)

Oasis of Murals (<http://www.oasisofmurals.com>)

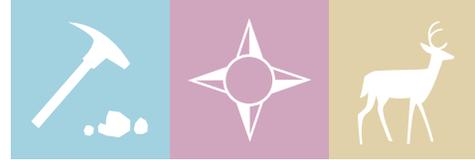
Desert Studies Center at Zzyzx (<http://biology.fullerton.edu/facilities/dsc/zzyzx.html>)

LOST DESERT GOLD MINE

(<http://www.ghosttownexplorers.org/california/lpt/lpt.htm>)

(<http://www.geocities.com/williamacarr/LostMine.html>)





BACK COVER

Cholla Garden in Joshua Tree National Park

PHOTO BY HOWARD GROSS

LAND MANAGEMENT AGENCY CONTACT LIST

BLM Barstow Field Office

2601 Barstow Road
Barstow, CA 92311
760-252-6000
<http://www.ca.blm.gov/barstow/>

BLM El Centro Field Office

1661 S. 4th St.
El Centro, CA 92243
760-337-4400
<http://www.ca.blm.gov/elcentro/>

BLM Needles Field Office

101 W. Spikes Road
Needles, CA 92363
760-326-7000
<http://www.ca.blm.gov/needles/>

BLM Palm Springs Field Office

690 W. Garnet Ave
Palm Springs, CA 92258
760-251-4800
<http://www.ca.blm.gov/palmsprings/>

BLM Ridgecrest Field Office

300 S. Richmond Rd
Ridgecrest, CA 93555
760-384-5400
<http://www.ca.blm.gov/ridgecrest/>

California Department of Fish and Game

Lands and Facilities Branch
1812 9th St.
Sacramento, CA 95814
<http://www.dfg.ca.gov/>

California State Parks

1416 9th Street
Sacramento, CA 95814
661-942-0662
<http://www.parks.ca.gov/>

Death Valley National Park

NPS, PO Box 579
Death Valley, CA 92328
760-786-3200
<http://nps.gov/deva>

Juan Bautista de Anza National Historic Trail

NPS Pacific West Regional Office
1111 Jackson Street #700
Oakland, CA 94607
510-817-1438
<http://www.nps.gov/juba/>

Joshua Tree National Park

NPS, 74485 National Park Drive
Twentynine Palms, CA 92277-3597
760-367-5500
<http://www.nps.gov/jotr>

Manzanar National Historic Site

NPS, P.O. Box 426
Independence, CA 93526
760-878-2932
<http://www.nps.gov/manz/>

Mojave National Preserve

2701 Barstow Road
Barstow, CA 92311
760-252-6100
www.nps.gov/moja

Old Spanish National Historic Trail

National Trail Systems, P.O. Box 728
Santa Fe, NM 87504-0728
505-988-6888
<http://www.nps.gov/olsp/>

Route 66 National Historic Corridor

Route 66 Corridor Preservation Program
PO Box 728
Santa Fe, NM 87504-0728
505-988-6701
<http://www.cr.nps.gov/rt66/>

Santa Rosa and San Jacinto Mountains National Monument

BLM Palm Springs Field Office
690 W. Garnet Ave
Palm Springs, CA 92258
760-862-9984
http://www.ca.blm.gov/palmsprings/santarosa/santa_rosa_national_monument.html

ACKNOWLEDGEMENTS

A SPECIAL NOTE OF APPRECIATION GOES TO THOSE WHOSE GENEROUS GRANTS AND DONATIONS MADE THE REPORT POSSIBLE:

Anonymous
Ruth and Ben Hammett
Carol and Ronald N. Jacobi
Mrs. C.E. Jacobs
Mr. Michael Malaga
Mrs. Nancy F. Perkins
Mr. George W. Perkins, Jr.
Panta Rhea
Mr. and Mrs. Al Sommer
Jennifer and Randy Speers

WE THANK THE MANY PHOTOGRAPHERS AND FEATURED STORYTELLERS WHO SHARED THEIR DESERT EXPERIENCES, THE NATIONAL PARK SERVICE, THE BUREAU OF LAND MANAGEMENT, CALIFORNIA STATE PARKS AND THE FOLLOWING PEOPLE FOR THEIR INVESTMENT AND CARE IN PRODUCING THIS REPORT:

Felicia Carr
Courtney Cuff
Deborah DeMeo
Neal Desai
Carolee Doughty
Howard Gross
Andrea Keller Helsel
Laine Hendricks
Kelli Holsendolph
Scott Kirkwood
Amy Marquis
Pensaré Design Group
Linda Rancourt
Ron Sundergill
Lacey Worell



COMPLETE COPIES OF THE REPORT MAY BE OBTAINED AT
http://www.npca.org/desert_recreation/report.pdf

FOR MORE INFORMATION PLEASE CONTACT:

NPCA California Desert Field Office

61325 29 Palms Highway, Suite B
Joshua Tree, CA 92252
760-366-7785

Since 1919, the nonpartisan National Parks Conservation Association has been the leading voice of the American people in protecting and enhancing our National Park System. NPCA, its members, and partners work together to protect the park system and preserve our nation's natural, historical, and cultural heritage for generations to come.



National Parks Conservation Association®
Protecting Parks for Future Generations®

1300 19th Street NW • Suite 300 • Washington, DC 20036
202.223.NPCA(6722) • Fax 202.659.0650 • npca@npca.org • www.npca.org

