

# East Mojave Ational Scenic Area

# **WILDLIFE: SECRETIVE BUT THRIVING**

Wildlife in the East Mojave is more abundant than visible. The night-time evasive habits of desert creatures may lead one to believe the area is devoid of animal life except for a few scattered domestic cattle. However, nearly 300 species live here, including reptiles, birds and mammals, amphibians, and several species of endangered fish, insects, and even a land

Some animals are endemic to the East Mojave, meaning they live nowhere else. An entire population may live on a few acres of sand dunes or in a small grove of white firs on a mountain peak. Another species may occupy nearly every habitat in the East Mojave. Individual members of a species may be seen in almost any part of the desert, or may stay in or near a small area containing their preferred

In the rugged mountains live the majestic desert bighorn sheep and the wary mule deer. Other mammals include porcupines, bobcats and moun-

Animals preferring flat terrain, or the low to medium elevations of the valley floors, include coyotes, kit fox, antelope ground squirrels, packrats, and desert tortoises. Scorpions and tarantulas are more likely to be at lower elevations as well. Many snakes and lizards can be found at all elevations, among them four species of rattlesnakes.

Many wildlife species are protected. Some animals are rare or are declining in number so that the loss of desirable habitat could threaten them with extinction. The desert tortoise, found in many of the valleys, and the Mojave chub, found in spring-fed ponds near Soda Lake, are in this class.

In the canyons, a variety of game birds, such as quail and chukkar, make their home. Using scarce water, finding cover in the dense brush, and feeding on seeds of annual grasses, they provide the sporthunter a challenge and the visitor with a thrill as a covey scurries across a road.

# EAST MOJAVE NATIONAL SCENIC AREA

### A FIRST FOR THE NATION

Twisted Joshua trees towering over shrubcarpeted land, rock spires tapering skyward, softsculptured sand dunes, and flat-topped mesas all brought special acclaim to California's East Mojave Desert. However, it was the cowboys' and prospectors' windmills and mineshafts, combined with the region's natural "gemstones," that inspired the creation of the East Mojave National Scenic Area.

Concern for the protection of the East Mojave's famed natural treasures, as well as preservation of traditional uses such as mining and livestock grazing, stimulated the U.S. Department of the Interior in 1980 to designate 1.4 million acres East Mojave of public land as the nation's first National Scenic Area. As a National Scenic Area, the Bureau of Land Management (BLM) manages the region to ensure the continuation of traditional uses which give the area its character, while retaining its natural scenic quali-

This remote slice of the Old West, from Baker on the west to U.S. 95 on the east, and including all the area between two major east-west highways (Interstate 15 and Interstate 40), is a land that combines spectacular natural landscape, unique history, and

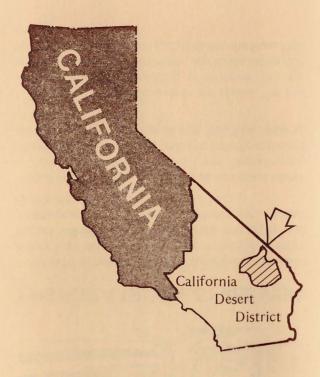


Pinto Mountain

In desert country, springs and water holes are extremely important to wildlife. Camp at least 600



Wildlife habitat management on public lands is the responsibility of the BLM, while the California Department of Fish and Game manages the wildlife species. Hunting is permitted on public lands in accordance with State Fish and Game regulations. If your interest lies in hunting, trapping, or collecting, be sure to obtain the proper license or permit.



## A MELTING POT OF DESERT CLIMATES AND COLORFUL HISTORY

The East Mojave region is a convergence of desert ecosystems. Within it are elements of the low or Colorado Desert, the high or Mojave Desert, and the cooler Great Basin. The East Mojave is a miniature version of the great California Desert, a microcosm contained in 10 percent of the 25-million-acre California Desert Conservation Area established by Congress in 1976.

The East Mojave is also a pathway of history. Hundreds of years ago, a trail used by Indians as a trade route between the Colorado River and the California coast carved its way through the heart of what is now the National Scenic Area. Later, military roads and pioneer wagon trails to the fertile coastal valleys also traversed the area. Still later, railroads and highways that bridged the nation were constructed across the East Mojave.

# FLORA OF THE EAST MOJAVE: A BOTANICAL BLEND

The flora of three deserts share the soils of the East Mojave. The greatest influence on the plant communities comes from the Mojave Desert, sustaining such noticeable plants as the Joshua tree and the Mojave yucca. The Great Basin exerts its influence here by bringing purple sage into the region, while traces of the Colorado Desert, including smoke tree and palo verde, also creep into the

For many people, the Joshua tree best characterizes the Mojave Desert. These towering relatives of the dainty lily, with their strange branches and striking white blossoms, are found mostly above 3000 feet in elevation. They occur in many areas, but the best stand of Joshua trees can be seen in the Cima Dome area. Other regions of higher elevation are dominated by scrub plants such as sage, blackbrush, rabbitbrush, and yucca. The higher hills and mountains are dotted with pinyon-juniper woodlands that are joined by oaks in some of the moun-

A few places exist where a spring, seep, or favorable exposure has created a special nook where small colonies of plants seem to defy the desert's climatic constraints. A fern garden in the Providences, a few stands of white fir on the peaks of the Clark and New York Mountains, and several spring-fed oases are a few of the botanical surprises tucked away in East Mojave's mountains.

The lower elevations are characterized by the hardy, evergreen creosote bush, interspersed with annual grasses and wildflowers. Sandy areas often have dense stands of galleta, a tufted perennial grass providing excellent cattle forage. Rocky alluvial fans and lower slopes are home to a fascinating variety of cacti, some of which are endangered, and all protected from collectors.

In wet years, the spring traveler will be rewarded with magnificent floral displays for which the East Mojave is famous.

The East Mojave affords visitors a chance to see that deserts are not wastelands, and that wise use and resource protection can exist side by side. When in the East Mojave, visitors can explore history, learn about cultural resources, and experience the joys of learning about desert plants and wildlife in a natural setting. If you love discovering things on your own, the East Mojave will especially captivate you.

# CLIMATE: HOT BELOW, MILD ABOVE, BUT MOODY **EVERYWHERE**

Typical of other parts of the California Desert, the East Mojave is mostly dry and sunny. Visitors, however, need to be prepared for both the extreme variation in climate at different elevations and the yearlong potential for sudden and unexpected weather changes. Summer can bring violent thunderstorms. Don't camp in washes if there is any threat of a storm. Flash floods may occur in a wash any time "thunderheads" are in sight, even though it may not rain a drop where you are.

Summers are hot, particularly at lower elevations. Thermometers often top 100 degrees daily from May through September in places like Baker, Nipton, and Essex. Daily temperature variations of 40 degrees are not uncommon.

Many areas accessible to desert travelers exceed 4,500 feet in elevation, where temperatures are much cooler than on the desert floor. Summer daytime temperatures rarely exceed 95 degrees. Always plan on cool evenings while visiting the desert's pinyon/juniper woodlands.

Winters are cool and damp. Freezing temperatures are common at night, and occasional snow flurries are not unusual. Winter cold fronts regularly dust the higher mountain peaks with white powder.

Spring and fall can be variable, being balmy some days and windy on others. Always be prepared for cool, crisp nights.



# MINING THE MOJAVE: **BOOMTOWNS AND BONANZAS**

The prospector and hardrock miner are the most storied figures of the desert. The East Mojave has its share of abandoned mines and desert camps to testify to this activity that once flourished. Some of these mines have continued or may again operate. Mining camps seemed to spring up overnight at a gold or silver strike, complete with post office, saloons, hotels, and newspapers. Some camps died as quickly as they were born due to marginal deposits, or changing economic conditions. The biggest problems were isolation and the high cost of transportation. Everything was expensive and nearly all supplies had to be transported to the camps including food, fuel, timbers, machinery, and in some cases, even water.

# **EAST MOJAVE'S MOUNTAINS:** MILE-HIGH ISLANDS ABOVE A SEA OF SEDIMENT

The East Mojave is a desert of mountains, not of sand. From a distance, the mountains seem to rise abruptly from flat desert-like islands. The mountains are huge blocks of rock surrounded by earthquake faults. Over time, movement in these faults has caused some blocks to be elevated, others to fall. Since high places erode and fill in low places, the mountains have been burying themselves, with the valleys filling in with sediment to such an extent that several thousand feet of material now cover some of the valley floors.

The mountains are not randomly placed. A glance at any map will show three major trends: Southeastnorthwest (Sacramento, Bristols, and Old Dad Mountain); north-south (Piutes and Ivanpahs); and southwest-northeast (the Granite-Providence-Midhill New York chain). In each case these orientations follow major fault zones.



Clark Mountain



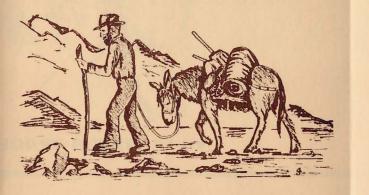
Table Mountain

Promoters of the transcontinental railroad were sensitive to mining, and the railroad made every effort to accommodate the prospectors. During the "Great Years" (1900-1919), more mines were opened and operated profitably than in any other period in San Bernardino County history. The mining boom created numerous towns, including Vanderbilt, Providence, and Hart. Cima, Goffs, Kelso, Fenner, Essex, and two towns named Ivanpah which were at different locations also owe their creation to mining and the railroads.



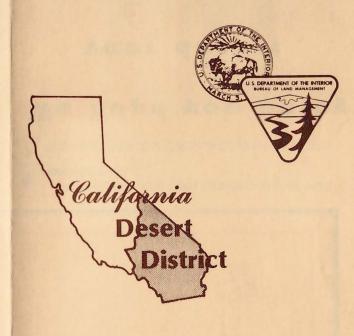
Mohawk Mine

Minerals taken from the East Mojave include gold, silver, magnetite, copper, tungsten, zinc, lead, and iron ore. During World War II, the Vulcan Mine in the Providence Mountains was a major supplier of iron ore to the Kaiser Steel plant at Fontana. In recent years, rare earth minerals, clay minerals, sodium and potassium have gained importance. A mine at Mountain Pass, just outside the scenic area, provides major chemical components for many hightechnology appliances such as color television. It is one of the largest mines of its kind in the world.



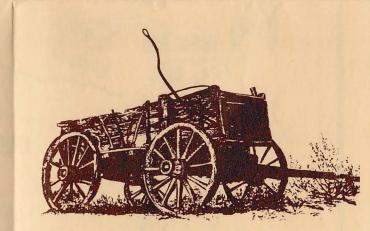
# **BUREAU OF LAND MANAGEMENT**

The vast open spaces of the California Desert are uniquely situated within a few hours' drive of over 14 million people. In recognition of the special challenges created by this situation, Congress established the California Desert Conservation Area (CDCA) in 1976. Approximately half of the desert's 25 million acres are public lands administered by the Bureau of Land Management (BLM), an agency of the U.S. Department of the Interior. Congress directed the BLM to provide for the administration of public lands in the CDCA in a way that would protect its unusual natural and cultural values while providing for the wise use of its resources. The administrative headquarters for the CDCA are located at the BLM's California Desert District Office in Riverside. Public lands are managed for a variety of uses, including minerals, livestock grazing, wildlife, watershed, wilderness, and recreation.



AREA OFFICE 901 3rd Street Needles, California 92363 (619)326-3896

NEEDLES RESOURCE CALIFORNIA DESERT DISTRICT OFFICE 1695 Spruce Street Riverside, California 92507 (714)351-6394



### **COWBOYS AND CATTLE:** THEN AND NOW

Cattle ranching began in the East Mojave in the late 1800's. The rich rangelands of Cima Dome and Lanfair Valley provided plentiful grasses for livestock as well as for the animals that pulled wagons over the Mojave Road. In 1894 the Rock Spring Land and Cattle Company was founded and became a dominant force extending its operations throughout most of the East Mojave and a large area of southern Nevada. The OX Cattle Company remains today as a direct descendant of the Rock Spring Land and Cattle Company.

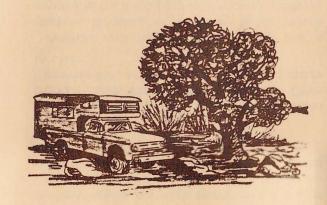
There are 11 ranching operations within the East Mojave National Scenic Area that operate under permit by the BLM for livestock grazing on public lands. Livestock is managed so that grazing uses do not adversely impact the vegetation. Fences and water developments control the movement of stock. Range improvements are often constructed as a cooperative effort between the rancher and the U.S. Government. Frequently these improvements benefit wildlife and provide other resource protections. Please do not damage any range facility. Be sure you leave gates as you find them. Remember to camp at least 600 feet from water sources.

# **EXPLORING THE SCENIC AREA**

The East Mojave National Scenic Area is easily accessible from either Interstate 15, which edges most of its northern boundary, or Interstate 40, which traces its southern boundary.

Many travelers may hesitate to leave the relative security of the interstate highways, but the region is crossed by a variety of paved or well-maintained gravel roads. For the venturesome, a variety of more primitive routes provide access to many of the area's remote corners. The map shows general access throughout the entire scenic area.

You should keep your vehicle on signed or welldefined routes. There are no vehicle open or "play" areas within the scenic area. (Contact BLM offices for information about vehicle open use areas.)



Here are some points of interest to explore:

KELBAKER ROAD, which leaves I-15 at Baker. and I-40 at the Kelso and Amboy exit, is a primary north-south access route. It passes through the historic town of Kelso (E-4), site of the classic geo-Spanish style railroad depot along the Union Pacific Railroad. The scenic Kelso Sand Dunes (F-4) are one of the highest dune fields in America, and one of only two dune systems in the continental U.S. which "boom" a deep, resonating sound when sand slides occur down steep slopes. Kelbaker Road passes between the Granite and Providence Mountains, two of the higher and more striking ranges within the scenic area.

CIMA ROAD takes the traveler through a Joshua tree forest on Cima Dome (D-4), a gently sloping structure which covers an area of 75 square miles. The weathered granite of Cima Dome is so well-rounded it is considered to be the most symmetrical domal structure in the country. From I-15 or Midhills, visitors can get the best view of the large expanse of Cima Dome.

ESSEX ROAD exits from I-40 and leads 17 miles to Providence Mountains State Recreation Area and Mitchell Caverns Natural Preserve (F-5), operated by California Department of Parks and Recreation. Tours of the caverns are conducted daily from fall through spring. There is a visitor center and camping area with six sites limited water supply \$3.00 per night camping fee.

CEDAR CANYON ROAD is an east-west route connecting Cima and Lanfair Roads. It allows travelers in passenger cars to pass over at least a part of the old Mojave Road. The road also passes remnants of old ranches and homesteads, stark reminders of life in the East Mojave during the late 1800's.

MOJAVE ROAD. The ancient Mojave Indian trail, that connected Mojave villages along the Colorado River with the California coast, crosses 130 miles of the National Scenic Area. The trail was the trade route used by the Indians to exchange food and other products for sea shells and various goods from coastal Indian villages. Spanish missionary Francisco Garces was shown the trail by Indians in 1776 and, by the early 1800's, numerous American mountain men, including Jedediah Smith and Kit Carson were using the trail.

With the aid of camels, the U.S. Army shaped the trail into a wagon road in the late 1850's, and the trail became known as Mojave Road or Government Road. The trail became one of the most important in the west, being used by the U.S. military, the postal service, as well as the wagon trains of California pioneers.

IVANPAH-LANFAIR ROAD, leaving from the Nipton Road exit of I-15, crosses Ivanpah Valley, one of the more likely places in the California Desert to spot the desert tortoises in the spring. The road climbs over the New York Mountains, passing many old mines. Look carefully and you can see the old route of the railroad which carried rich ore to distant mills and smelters. Lanfair Valley was the scene of homesteading during a wet period after World War I. Families cleared fields and planted crops, only to see their dreams blow away in the dry years that followed. Traces of these fields can still be seen in the valley. This road through history ends at Goffs (F-7) on old Route 66.

Stops along Mojave Road you may want to visit:

FORT PIUTE (E-7), one of the first stops on the Mojave Road was, and still is, a welcome sight to travelers. Along Piute Creek, one of the region's few perennial streams, willows, sedges and cottonwoods create a desert oasis for man and wildlife. Piute Creek was an important water source. To guard the road and offer assistance to travelers, an Army way station was constructed here in 1867. Today, the ruins of Fort Piute tell their own story. The old route of the Mojave Road (from Fort Piute west to Lanfair Valley), is no longer passable.

CAMP ROCK SPRING (E-6), the only official U.S. Army camp between Camp Cady and Fort Mojave, was built here in 1866. Today, remnants of living quarters and fortifications built by the soldiers can be seen. Rock Spring continues to be an important water source for livestock and wildlife. Petroglyphs can be seen on rock walls above the spring and camp ruins, indicating its value over a long history of human use of the East Mojave.

Today, Mojave Road has been restored as a recreational trail between Fort Mojave on the Colorado River and Camp Cady on the Mojave River. For vehicle travel by visitors, 4-wheel drive vehicles are required except were the route has become a county road. Contact BLM for specific information regarding the entire route.

BLACK CANYON ROAD is a major northsouth route that takes you through Hole-in-the-Wall country. This is cowboy country, with pole corrals, windmills and loading chutes. Along this route you'll see Wildhorse Mesa, Wildhorse Canyon, the volcanic rock formations of Hole-in-the-Wall, and the pinyon/juniper woodlands of Midhills.

HOLE-IN-THE-WALL CAMPGROUND (E-5) (4200' elevation) is located just off Black Canyon Road mext to sculptured volcanic rock walls and towers. Banshee Canyon, cutting through these formations, has iron rings set in the rock to help you climb down and through to Wildhorse Canyon. There are nine designated campsites with ramadas and picnic tables. A small open area at the north end of the campground is suitable for group camping. There is limited water, pit toilets, and a daily use fee of \$2.00.

HOLE-IN-THE-WALL FIRE STATION and DESERT INFORMATION STATION (E-6). The fire station is manned during the summer months only. In case of emergencies, the fire crew can get assistance through radio contact. During holidays and busy weekends from fall to spring, the information station will be manned or information will be posted and brochures available.

MIDHILLS CAMPGROUND (E-5) (5600' elevation) is located 2 miles west of Black Canyon Road. There are signs directing visitors to the campground. Located in a pinyon-juniper woodland, the campground provides a central location for hiking and sightseeing. The northerly campsites offer good views of Cima Dome. There are 26 sites, pit toilets, picnic

tables, limited water, and a daily use fee of NOTE: Since firewood is scarce in the campground



\$2.00.

areas, you should bring your own.

# TIPS FOR A TROUBLE FREE-VISIT

Rules have been established for all public lands to insure your safety as well as the protection of other visitors, wildlife, natural and cultural resources, and private property. For additional information, contact BLM's Needles Resource Area Office.

Plan your outings carefully. Tell someone where you are going and your route of travel. Stay with your planned itinerary. Should you have trouble and need assistance, stay with your vehicle. You'll be easier to

Water sources are scarce in the desert. For this reason, camping, picnicking, or otherwise occupying, for more than 30 minutes, any lands within 600 feet of watering places is prohibited by the State Fish

Hobby rock collecting is permitted. Rocks, minerals, gemstones, and common invertebrate fossils may be removed by hand in reasonable quantities for personal collections. Removal for commercial sale by means of mechanical equipment requires a BLM permit.

Rattlesnakes, scorpions and some spiders are dangerous and are best viewed from a distance. Never walk or put your hands where you cannot see.

Firearms practice and hunting of game animals are permitted, subject to federal, state and local regulations. All mammals, birds, and reptiles are protected, unless specifically designated as game animals. Please use common sense — know where you are aiming your weapon. Don't shoot from, or across a road, or within 1/2 mile of developed recreation sites.

Hiking, backpacking, and equestrian use are permitted on public lands, subject to restrictions around wildlife water sources.

Vehicle camping is permitted on public land within 300 feet of any route of travel but no closer than 600 feet to water sources.

Private lands are scattered throughout the area. Please respect private property as you would like others to respect your own.

Pets are permitted, but should be kept under control at all time in consideration of other visitors and for the protection of wildlife.

Plant collecting is allowed by permit only, with three exceptions. Permits are not required for:

- 1. Small-scale collection of annual wildflowers for personal use.
- 2. Small-scale collection of dead and dry plant material (other than firewood) for personal ornamental use.
- 3. General collection of dead and down wood for on-site campfires. Because wood is scarce, bring your own from home. Cacti, ironwood, and other desert plants are protected by Federal and State law. Cutting or collecting live or standing dead vegetation of any kind, or collection of firewood to be used at home, is prohibited except by permit from

For your safety: Stay on roads shown on this map that are suitable for your vehicle. Don't take chances—it's easy to get stuck. There are many unmaintained roads throughout the area that are not shown on this map. More detailed maps, showing additional primitive and 4-wheel drive routes, are available at the Needles Resource Area Office.

Allow other visitors the same experience you will enjoy by leaving all historic and prehistoric objects as you found them. Disturbance or removal of such objects is punishable by fines or imprisonment.

Help keep the area clean by taking all your trash home with you.

We hope you enjoy

your desert

adventure!

Bureau of Land Management Rangers are in the California Desert to help you have an enjoyable and safe visit and to protect cultural and natural resources. Contact any Ranger or BLM office for information or assistance.

# **EMERGENCY PHONE NUMBERS:**

BLM Rangers (24 hour emergency only) (714)351-6674 San Bernardino County Sheriff - Needles (619)326-4515 San Bernardino County Sheriff - Baker (619)733-4448 San Bernardino County Sheriff - Barstow (619)256-1796 California Highway Patrol-Ask Operator for Zenith 1-2000 Needles Desert Community Hospital (619)326-4531 (619)256-1761 Barstow Community Hospital (602)855-8185 Lake Havasu City Hospital San Bernardino County Fire Department (619)326-2211

