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Volume 34, Number 4

APRIL, 1971

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Containing as many and varied colors as an artist's palette, the hues of Arizona's Painted Desert change from sunrise to sunset. The kaleidoscope of color is located off U. S. 66 near Holbrook. Photograph by Robert F. Campbell, Concord, California.

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ELTA SHIVELY, Executive Secretary

MARVEL BARRETT, Circulation Manager

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## A Peek in the Publisher's Poke

THE MONTH OF April will soon be upon us bringing with it the magic of Springtime and, ending for many of us desert lovers, the winterlong wait to see if climatic conditions have been conducive to a good crop of wildflowers. From early reports in the Anza-Borrego area, the ocotillo have the lushest foliage in many years and blooms are appearing with a promising profusion. The sand verbena is just poking through and should take three weeks at least to reach the bloom

stage. The Lancaster, California area, famous for its colorful flower displays, should have a bumper crop, although early spring chills may hold back some areas.

The April issue of DESERT also brings something new to its readers. The column appearing on page 31, Notes from the Field, will be an informative one for the benefit of many who are out and about the West. Everyone is encouraged to send in any information they feel would appeal to fellow readers. The success of the column depends on the cooperation of our readership. Address all your correspondence to "Field Notes," c/o DESERT Magazine, Palm Desert, California 92260.

With almost everyone driving a recreational vehicle of some sort, it came as a shock to receive a news release from the Tire Industry Safety Council that states: "Nearly one-fifth of the recreational vehicles on the highways are dangerously overloaded."!

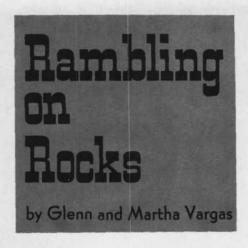
The Council bases its estimates on study by the Wisconsin Department of Transportation which found 21 percent of the vehicles inspected were carrying loads which exceeded the tires' maximum load-carrying capacity. Most important to desert travelers is the fact that excessive heat is a tire's worst enemy; most frequent causes are underinflation and overloading. Add to this the extra high air temperatures experienced in most desert areas and a really hazardous situation results.

The Council offers free of charge a "Recreational Vehicle Consumer Tire Guide." This contains information on proper tire care, charts covering load range and inflation pressures, and tips on how to increase the mileage and safety factors of tires. Write to "Recreation," Box 726, New York, N.Y. 10010.

The Council also has available a "Recreational Vehicle Tire Kit" which contains a copy of the booklet, a special high pressure air gauge calibrated to 120 pounds, a tread depth gauge and a set of four protective metal valve caps. Cost of the kit is \$3.50, and can be ordered from the "Recreation" address.

Next month will bring the readers the Special Northern Arizona-Southern Utah issue with a Desert Safari to Tonopah, Nevada, thrown in for good measure. This issue should prove a valuable summer vacation-planning guide to some of the most scenic areas of the West. For you newsstand buyers: if you can't find the May issue, because we anticipate a near sell-out, drop us a card and 50c and we'll pop one in the mail the same day.

William Knyvette



### JADE: What Goes Into a Name

PRACTICALLY EVERYONE knows of jade, and that it is a green gem. There are other colors of jade; gray, pink, nearly white, red, orange brown, and black. This material has had a long association with man, and is to be found on all continents in burials of ancient cultures. Most ancient peoples used it for tools and weapons because it was very durable. Later, cultures added the use of ornaments and fetishes, but the use as a tool persisted to the time of metals and beyond. The ancient Chinese cultures gave jade a place of reverence and built whole cultures around it. The lore and fascination of jade persists to this day; many people prefer it over any other gem.

Caucasian man was first introduced to jade in South America. The Conquitadores found the Indians using it as tools and ornaments. The present name is evidently derived from the Spanish word *ijada*, for flanks or loins, alluding to where it was worn. The use of jade never really flourished in Europe, probably for a lack of supply, and the already established use of metals and other gems.

The word jade does not signify any one mineral, but rather a number of them. What the word does indicate, is a stone of great toughness. This should not be confused with hardness; they are two very different things. We like to use a piece of soft leather as an example. A fingernail may easily make a deep groove in a piece, thus showing that it is not hard. On the other hand, one would spend many hours trying to chew through it, proving its toughness. Jade is very tough, and is about 6 to 7 in hardness, which is mineralogically

soft. This toughness is due to its being made up of many small fibers, intimately interlaced and locked together. Leather is tough for the same reason.

When the gem cutter works with jade, he finds this toughness resists him to the point where progress is slow. It is possible to grind away only a few fibers at a time. These are so locked with others, that most of the time only part of a fiber can be removed. Once an individual fiber is gone, the work can proceed to the next. This extreme toughness does make slow work, but greatly reduces breakage, which can be a greater problem.

Two minerals are most commonly called jade. These are jadeite, a pyroxene, a group that includes rhodonite and spodumene; and nephrite, a type of amphibole, of which asbestos is a member. The name jadeite is derived from the name jade, while nephrite is from the Latin, nephros, meaning kidney, and probably referred to the kidney shape of many pieces when they are found. Practically all of the prehistoric use of jade was confined to these two minerals.

It is interesting in that neither of these two jade minerals appears in China. The first use of jade in China was the chenyu, a nephrite that came from central Asia. What is now known as Chinese jade is jadeite and comes from Burma. It is correctly called Burma jade.

The other minerals that can masquerade as jade are: a type of vesuvianite, better known as californite, a massive form of garnet from Africa called Tranvaal jade, a type of serpentine called bowenite, and certain minerals in massive form, such as epidote, prehnite, smithsonite, and others. Of this group, the californite and the garnet are so much like jadeite or nephrite that at times they can confuse some experts. The sale of either of the two as jade is not really fraudulent, for the name jade refers only to a characteristic, and at least to some degree, these possess it. The other members of the group usually lack hardness or other desirable quality, and the sale of these as jade at least borders on fraudulency.

Less than 50 years ago, someone that considered himself a jade expert made the statement that jade was not to be found in the United States. He did not make his decision with the amateur gem cutter in mind! Amateurs began to want

jade, and looked for it. They were rewarded with the marvelous find of nephrite in Wyoming. This spurred search in other areas, and up came californite, named for California where it was found. Other finds of both jadeite and nephrite were made in California and other states. Alaska today is probably the greatest producer of jade, and other areas are undoubtedly waiting to be found. Rough jade can be easily overlooked as it weathers on exposure to where the pieces are covered with a worthless "rind" that does not resemble jade.

Most jade cutters experience various amounts of difficulty in polishing. This is due to many included impurities. Far too often the best polish that can be obtained looks much like an orange peel, and is commonly referred to as such.

A number of years ago, an enterprising individual decided that the polishing problems with jade should be solved. He conceived the idea of contacting jade cutting experts and asking them to divulge their polishing secrets. Most of the experts complied, but when their methods were compared, no two were the same. Further investigation showed that each was an expert at cutting and polishing one type of jade from one or only a few localities. All that could be learned was how to polish a certain type of jade from a certain locality. This, of course, was valuable information, and has been put to use by many. It was only further emphasis on the highly variable characteristics of the minerals we call jade.

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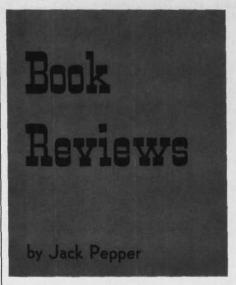
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### GRAND CANYON TREKS

By Harvey Butchart

This is an informative book for veteran hikers who are interested in exploring the Grand Canyon, one of the "most beautiful, awesome, friendly and vicious regions of the world."

The author, mathematics professor at Northern Arizona University, has spent 25 years exploring on foot the inner reaches of the Grand Canyon. This book is a MUST for those who are planning to spend one day-or weeks-hiking through Arizona's giant gorge. Paperback, illustrated with photographs and maps, 72 pages, \$1.95.

### TRAVEL GUIDE TO BAJA CALIFORNIA

By Sunset Editors and Ken and Caroline Bates

In spite of the fact that there are hundreds of publications, of various sorts, on Baja California, I have found very few

useful to the traveler. Worst of all, most of those that seemed attractive were very short on good accurate information. Now, at long last, here is one that tells the story of this interesting land as it really is. Gerhard & Gulick's, Lower California Guidebook is an excellent and useful guide to the roads, but does not attempt to take the reader to the people. This new book will become the older one's companion.

Travel Guide to Baja California is well written, well organized to the geographical peculiarities of the penninsula, and helps to take the reader to the people. After one has bounced down the unique roads, and viewed the spectacular scenery, the people of the penninsula begin to come into focus, and they are the real attraction. It is a pleasure to find a book that assists in bridging the gap between our cultures. The pictures are excellent and speak eloquently where words might fail.

The maps are a special delight. The maps in this new book are very up to date, but of course, they will not stay that way. Another feature of the maps that strikes us as desirable is that only the main and secondary roads are shown. There are many roads not shown, but these are very poor in most cases and nearly always need specialized vehicles. In other words, this book will not easily lead the neophyte

From the standpoint of the scientist, the book is a contribution. All of the scientific names of plants and animals are correct. Most of the common names given are those used by the Mexicans, and this is as it should be. We will, however, take exception to one. The very interesting cirio tree (pg. 40) is also listed as the boojum tree. In spite of the fact that a botanist imposed this name to the tree, the name cirio is that used by the Mexicans. This is their country, and the tree is exclusively theirs. Why should we use a very foreign name for it?

As in all publications, things change during the time the work is in process. One change was missed here. The large lake in the Constitution National Park, in the Sierra Juarez Mountains (pg. 31) is now officially known as Laguna Juarez, instead of Laguna Hanson. We have always wondered who this Hanson was.

If one wishes to get the most out of a trip to Baja California, he needs a book



300 N. Victory Blvd., Burbank, Calif., 91502

that will lead him into the interesting nooks and corners that are the real secret of any foreign country. This book will take you there, and then help to introduce you to the people that live there. We can heartily recommend it for the experienced as well as the first-time traveler in the penninsula. Large, 8 x 11 format, 4-color cover, heavy paperback, 80 pages, \$1.95. (This review by Desert's Lapidary Editor Glenn Vargas, a Baja aficionado who has traveled throughout the penninsula for many years).

### LETS GO PROSPECTING

by Edward Arthur

If you want to go gold panning, looking for diatomaceous earth or tungsten, search for beryllium, gem stones and any of the other wide variety of valuable minerals found in California, Let's Go Prospecting furnishes a wealth of information.

The new and revised edition of the book has 84 pages of facts gleaned by the author during his 30 years of experience in searching for minerals and gems in California, the Southwest and Mexico. During his job as mining commissioner for the Los Angeles Chamber of Commerce he spent years calling on the mines, mills and smelters of these areas, recording all of the known mineral deposits and mining operations.

For those who feel there are no mineral deposits undiscovered, the author states, "It is a fallacy to assume that 100 years of prospecting have served to locate all valuable mineral deposits. The old-time prospector, in his search for gold, walked over and did not recognize

NOTICE all the books reviewed in DESERT Magazine are available through the Desert Magazine Book Shop. Please add 50 cents per order (not per book) for handling and postage. California residents must also add 5 percent sales tax for the total amount of books.

many deposits of minerals which are, in our modern industrial age today, more valuable than gold."

The author states there are valuable semi-precious stones, deposits of industrial chemicals and minerals of commercial value in the "backyard" of California waiting for a ready market.

In addition to the mineral maps, the book includes the occurrence, uses and marketing data of 46 commercial minerals with potential buyers. Large 8 x 11 format, illustrated, heavy paperback, 84 pages, \$3.95.

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## The Sands of

by Phyllis Heald

As you drive the length of Kino Bay and listen to the gently lapping waves of the Gulf of California, watch sea gulls and cormorants as they fly silhouetted against the blue Mexican sky, and smell the tangy salt water it's hard to believe you are living in the jet age. For this delightful six-mile strip of silken sand, 65 miles southwest of Hermosillo, Mexico, is not on any "flight pattern" nor has it yet become an "in" place for the international jet set.

However, residents of Hermosillo enjoy their isolated water resort and many attractive beach homes have been built along the "strip," somewhat reminiscent of Malibu in California. They give a certain old world charm to the setting as sunlight sparkles on colored tile and white-washed adobe walls. And, if you are interested, it is still possible to lease beach frontage with a 36-year (renewable) contract.

High on a cliff overlooking the entire bay, as well as giving views inland across the cactus-strewn delta land, is the *Posada del Mar*, a new hotel complete with swimming pool and other American-type luxuries. All this plus a breathtaking panorama that hasn't changed since the Jesuit

priest, Padre Kino, camped here 285 years ago.

Two other motels, and trailer park sites, offer accommodations to fit almost any pocketbook at this year-round vacation spot. The Kino Bahians consider their coastal resort ideal in summer when the days and water are warm, and the evenings cool. During winter the swimming is still good (for the hardy) while deep-sea fishing and sailing are ideal sports. And in any season it is always a joy to *siesta* on the beach or wander barefoot along its water edge.

A striking landmark of the area is Alcatraz Rock which rises out of the bay waters in a formidable mass. Here pelicans nest and raise their young. Alcatraz has played an important role in the life of the Seri Indians who live along this coast. For hundreds of years it supplied them not only with food, but with feathers for their ceremonial robes. The hunters would paddle their dugout canoes to the island at dusk, wait patiently until their quarry settled down for the

night, then creep up and club them to death. These were always hazardous forays because the full-grown pelican is a fighter and with a wing-spread of 10 feet can be a formidable opponent. But their feathers made exquisite adornment, the meat was good and the eggs a luxury.

Thus the Seris of the past, impressive in their ceremonial costumes of down or deerskin, must have possessed a primitive dignity and beauty. In Father Kino's time these Indians roamed inland as far as Hermosillo, camping along the *Rio Sonora* which rises northeast of the city and empties into Kino Bay. But the Seris have never been a gregarious or very friendly people and were always at odds with other tribes.

Less numerous than their enemies they were eventually forced back to the coast where, finally, they took refuge on the Island of Tiburon. This veritable fortress, 35 miles long and 18 miles wide, is located close to the mainland where its southern tip can be seen from Kino Bay. And here the Seris, for a hundred years,

made their long, last stand against encroaching civilization.

Fresh water was a problem, but the Indians eked out an existence by fishing, hunting and using the native cacti and other succulents for food and clothing. During this time they also developed some crafts. The women made baskets and collected shells for decorations, beads and bracelets, while both men and women carved hard ironwood into effective figures.

It was early in the 20th Century that explorers, scientists and students became interested in the welfare of this unique tribe. Slowly the white man penetrated the stronghold and made friends. Isolation, intermarriage and a limited diet had their effects and, along with time, tide and nature, took a severe toll of the Seris. Their population dropped to 300 (from an original 5,000) and thus an absolutely pure Indian strain was headed for extinction. Realizing this, the Mexican government took charge; Tiburon was proclaimed a game preserve and the In-

Bahia Kino



Living is easy at Bahia Kino.
Fishermen work on their nets
and boats (opposite page)
before heading for the clear,
blue waters.
Alcatraz Island is in the background.
There are miles of clean
beaches (left) and excellent fishing.
Photos by the author.

dians were moved to the mainland. Now they live in two major camps near Bahia Kino.

Fishing continues as their major livelihood while carving and making shell jewelry is a fast growing industry. Some 30 of the older women still do beautiful basketry but the young girls seem to prefer a less tedious occupation.

The modern Seris are friendly and will be happy to have you visit their camp and watch them work and sell you their wares. You will be the proud possessor of authentic primitive art.

About two miles south of *Posada del Mar*, around a coastal bend, is *Puerto Kino*—known locally as Old Town. Kino Port is a fishing village. Its church is tiny but its school, large and new, plus a gas station at the highway junction, give a modern touch to this picturesque setting. Otherwise, at first glance, you might think *Puerto Kino* has not changed since its namesake camped there.

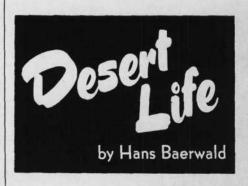
The beach is covered with fishing nets while smiling pescadors mend their seines. But civilization has crept in and now the small adobe homes of the Mexi-

can fishermen replace the brush shelters of the Seris. Even so, Old Town looks as if it were just dropped on the sands with every casa taking root where it fell.

If you want information, be certain to visit Shorty's Bar. A native of Wisconsin, Shorty first visited Puerto Kino in 1930. He returned in 1957 to stay. Shorty is the town's official interpreter as most of the inhabitants speak only their native tongue.

However, smiles and gestures do much to overcome linguistic problems in this village where wheeled carts, drawn by burros, are the vogue and where you can can sit in a vine-covered patio drinking cerveza as you wait for an order of delicately cooked fresh grouper, corvina, sea bass or even porpoise. Of course it is necessary to be patient. After all this is manana-land. But waiting is no chore because the breeze is softly refreshing and the vista through purple-flowered bougainvillea to the sand and the sea is as free of time-worry as is the cook.

And thus does Old Town and Kino Bay exist today. Aside from swimming, fishing and boating there is little to do in this off-beat sandy corner of Mexico's long west coastline. But there is time to lie on the beach and observe a little world without rush and bustle. There is time to contemplate the past and see a bit of life and land very much the same as it appeared when Padre Kino came to bless it. There is time to study nature and appreciate its starkness, its beauty, its cruelty and its wonder. There is time to remember and time to forget.



Ear tufts, which look like horns, give the Great Horned Owl its name, also called the Cat Owl. His cousin, the Long-eared Owl, is smaller. Desert campers are familiar with their night calls. Baerwald took this photo with a 35mm Exacta with a 400mm lens.

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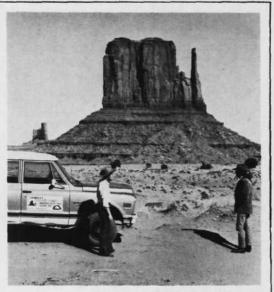


Photo by Terry Aldermo

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View of Red Rock Canyon (opposite page) as it runs south to join Deguynos Wash. Evening shadows make interesting patterns (below) in the lower canyon.



ANZA-BORREGO'S

T'S ONE of the most beautiful places in the half-million acres of Anza-Borrego State Park, according to the director of California's state parks.

It's a place that remains untraveled by man, where sandy washes are not incised with the tracks of dozens of vehicles. A place, too, where intricate-patterned fields of cracked, dried mud have not been pulverized to dust under the weight of a thousand wheels.

But chances are you cannot go!

This is not an area so remote, or so difficult to reach that few people visit. A part of Southern California's Anza-Borrego State Park, it is closed by blaring signs warning that this is the "Carrizo Impact Area, closed because unsafe."

The Carrizo Impact area is a 27,000-acre no-man's-land that has been closed to the public since 1942, except for the few brief years between 1959 and 1962. Although no longer being used as a bombing range, this explosive scrap heap has become a legal orphan with no agency wanting to take the responsibility to open it to the public.

The impact area is located in the Fish Creek Mountains, south of State 7 and the community of Ocotillo Wells. It lies in western Imperial County, southeast of the popular Split Mountain Recreation area of the state park.

The history of the Fish Creek region begins as far back as California's own colorful history. The famous Emigrant Trail, that brought so many to the west, and the Butterfield stage route, passed through the impact area.

Early cattlemen and prospectors left their initials carved in sandstone

## FORBIDDEN CANYONS

by Ernie Cowan

rocks in the inner canyons, and many believe the lost Hank Brandt and perhaps even the Pegleg mines are located in these colorful badlands.

In 1942 the U.S. Army hastily "borrowed" this portion of the Fish Creek Mountains from California for use as a practice bombing range. It was used by the Army for a few years and then leased to the Navy. It was actively used until about 1959.

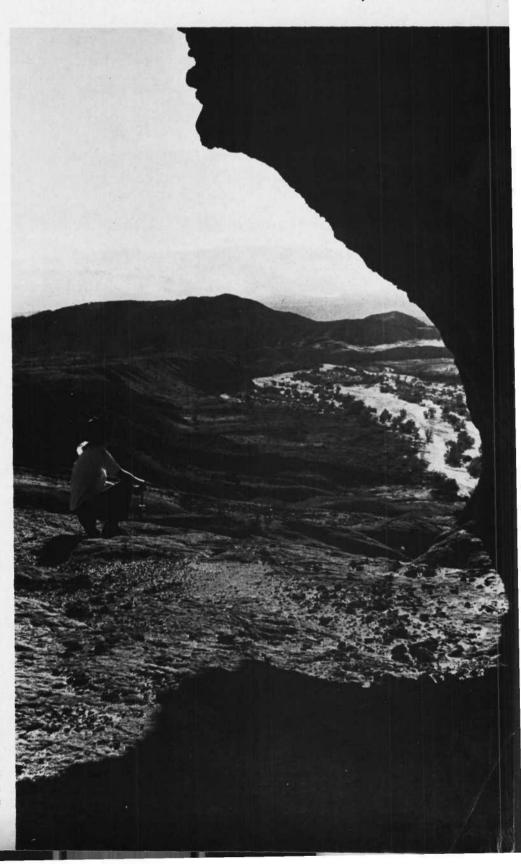
At this point the Navy sent in special teams to remove any live or dangerous explosives. Three sweeps were made and the Navy announced the area was clean and was being given back to the California park system.

Shortly after the bombing range was opened to the public in 1959, reports began to come in that live bombs were being found. Desert residents who live near the bombing range still have gardens decorated with bullets and bomb casings found there.

In 1962 the range was again closed when a man was injured in an explosion of some "scrap" taken from the area. Who is responsible for the area has been a controversy ever since.

The Navy's position is that it did all it could to clear explosives and turn the land back to the state. But state legal eagles say if the area is opened to the public it could pose a serious liability problem.

The result is a number of huge red-on-white signs telling the public they will be prosecuted if they enter. State park rangers make regular patrols of the range and issue citations to persons who disregard the warning signs. But state park officials are not content with the present situation. Despite the occasional find of



a live bomb, they feel there is little real danger.

Recently, by special arrangements with the state park, I was able to accompany Anza-Borrego Park Supervisor Jack Hesemeyer into a brilliantly scenic part of the impact area known as Red Rock Canyon. Hesemeyer said the bright red mountain that forms the canyon was used as a target by pilots in their practice missions. Red Rock Canyon clearly illustrates conditions within the bombing range.

It was one of those crystal clear "color slide days" when we began our trip along Carrizo Creek to where it joins Deguynos Canyon. We turned north up the canyon and shortly came to a branch that leads to Red Rock Canvon.

As we drove deeper into the canyon, the rocks began to change from the routine desert buff to a first soft, then brilliant red. A cluster of desert smoke trees provided a colorful con-

The heart of the canyon is littered with tons of twisted steel. Spent bul-



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Park Supervisor Jack Hesemeyer inspects an empty bomb casing in area.

lets from 20mm and 50 caliber guns dot the area like a giant seed pod burst and scattered its spore. We found ourselves looking for bombs, bullets and the implements of war rather than for the natural beauties so overpowering here.

As we bumped along over the road on the way out at sunset, I wished that everyone could see this beauty. Will this be the fate of other lands used by the military? Will they be forever closed to public use?

State park officials say they are working to reopen the bombing range. They have encouraging ideas that may work, providing they can please the legal minds that must still consider the question of liability.

William Penn Mott, Jr., California State Parks director, recently visited the Carrizo Impact area and found it a fascinating and beautiful spot.

Mott says he would like to see the area opened to the public as soon as possible. He feels the danger of injury from live explosives is exaggerated and that the Navy could make the area safe to entry. The Navy is very cooperative, Mott says, in coming in and removing any live material that is found.

"I think a team of men could spend a few weeks in there and remove all the visual pollution and this would be a real step toward opening the area," Mott said. "People would be less attracted if there wasn't evidence that this was a bombing range. With all the scrap removed, most people wouldn't even know this was a bombing range."

Mott said denying the public access to the impact range is unfortunate because of its scenic, historic and geologic significance. But there is no indication now that the Navy is willing to provide men for a sweep of the entire area.

James Whitehead, the capable ranger in charge of the district six region of the parks system, also expressed a desire to see the bombing range reopened. A year ago he proposed a plan for a unique camping experience if the impact area could be made safe and opened again.

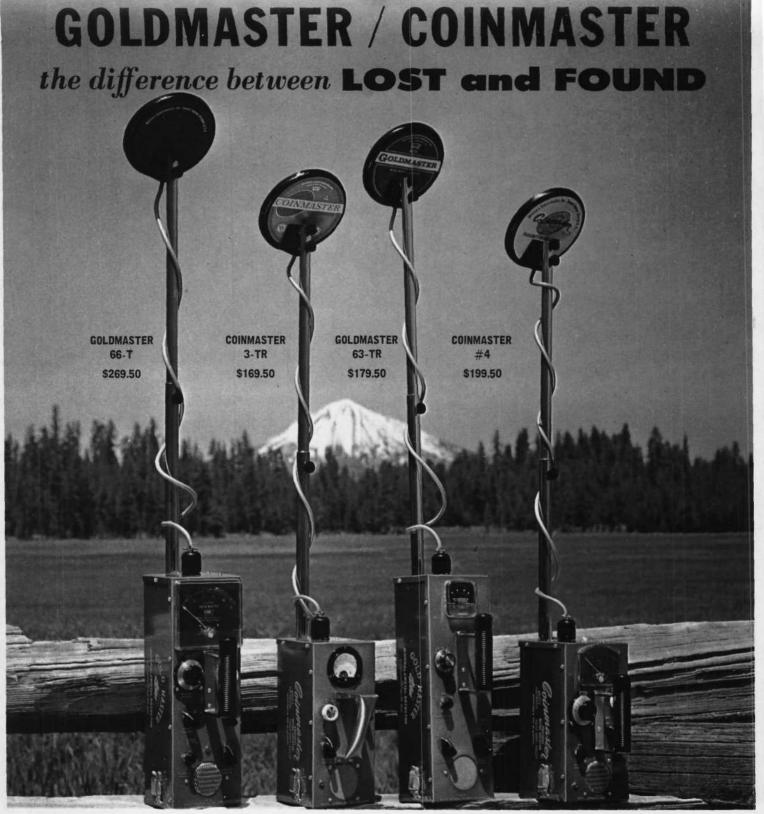
Since the Butterfield stage once rolled through Carrizo Creek, it was Whitehead's plan the old Carrizo Stage Station be rebuilt and perhaps a real stage used to haul desert visitors.

"We could perhaps have a real stage that would bring people to the old adobe stage station. There is little there that is unchanged from that area 100 years ago. It would be like stepping back in time," Whitehead

His idea is to get the Navy to use the impact area as a demolition training ground. "Such a program might be more expensive, but the Navy owes it to the people to clean this area up," Whitehead said. "Besides, when the value of this land is considered as a resource to the people, it would justify such a program."

Whitehead says he has been trying to sell the idea for a long time. but there seems to be little action. "I guess nothing will happen until people become interested enough to exert enough pressure to get somthing done," the ranger said.

Until that time, the canyons of Anza-Borrego's Fish Creek Mountains will remain off limits to civilians. 



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Winners in the male contest (above) are, right to left, Dean Chapman, Westminster, first place; Dan Brown, Claremont, and Murray Hirota, Azusa, tied for second; Phil Barnes, Long Beach, third, and Don Pepper, Lakewood, fourth. They hold detectors they used and their prizes and trophies. Elaine Daniels, Alhambra, (below) competes in panning contest.





### Pioneertown

More than 1,000 participants and spectators attended the recent Third Annual Convention of the Prospector's Club of Southern California at Pioneertown in San Bernardino County.

This was three times as many people than attended the organization's first convention three years ago and proves the increasing interest by outdoor enthusiasts in the comparatively new hobby of metal detecting.

Originally manufactured as military mine locators for industrial use, metal detectors range in price today from \$15.00 to \$800.00 and are used by young and old looking for buried treasures, coins, gold or any other thing of value under the ground.

Search areas range from ocean beaches and parks where

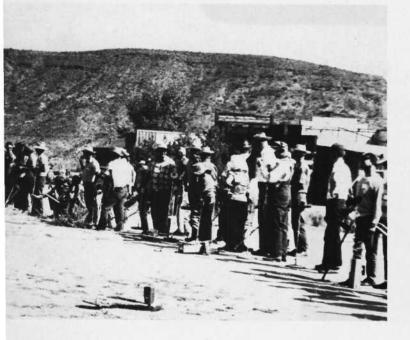


DEAN CHAPMAN, Overall Winner

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lost coins and valuables are found to old abandoned mines and ghost towns throughout the West. In the old days, when banks were few and far between—and when old-timers didn't trust bankers—men would bury their savings. Looking for these buried bonanzas, and loot buried by highway robbers, is becoming a major hobby—and for the more dedicated—a source of income.

Since metal detectors can be used by young and old and range in price to suit your needs, metal detecting is a family affair, one of the reasons it is becoming so popular. It also offers an excuse to get away from crowded urban areas and out under the open sky where you can find peace as well as a possible fortune.

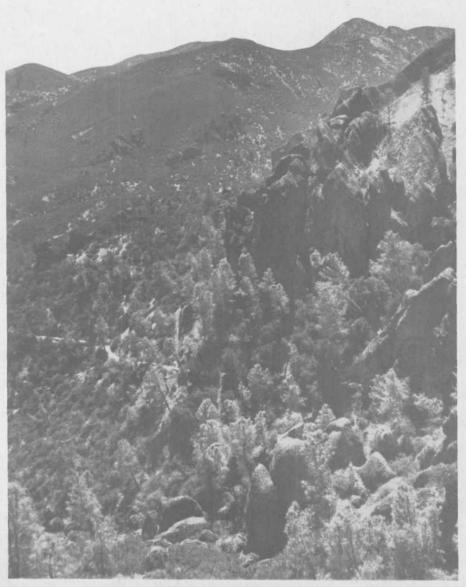


The three winners in the ladies metal detector contest (above) are, left to right, Vicky Blackwell, Long Beach, third, Virginia Strong, Orange, first, and Micky Hirota, Azusa, second. Murray Hirota (below) conducted the gold panning contests and was kept busy showing the youngsters how to find "color" in a pan. His two young pupils are Sherry Weiss and Heather Peterson, Huntington Beach. Joanne Kolbe, Chino, ousted her male competitors to win the overall contest.



### PINNACLES NATIONAL MONUMENT

by Chuck Richards



A HUNDRED YEARS ago the Pinnacles earned a dubious distinction. Hidden back up winding canyons, covered by tangled chaparral that clawed waisthigh, the towering crags and dark-damp dens provided a safe refuge for outlaws.

The area was called Robbers Roost, and with good reason, for the clientele that frequented the isolated accommodations was invariably all of the same professional pursuit. Road agents, stage robbers and horse thieves found it a ready fortress in the rocks and dens.

Best known of the breed who held residence here was Tiburcio Vasquez, California's most successful Mexican bandit chief. His career of crime spanned 20 years. In August of 1873, he led his band of reprobates in the holdup that became his most infamous—the Tres Pinos Massacre. Descending onto the general store at nearby Tres Pinos, they robbed, looted, gunned three victims into glory (a deaf teamster, a Portugese sheepherder running away, and the hotel keeper who was vainly bolting his door) and fled back to their hideout.

Shortly thereafter, Vasquez thought it

The craggy hills are covered with chaparral and digger pine which can withstand heat and cold and survive through long periods of drought.

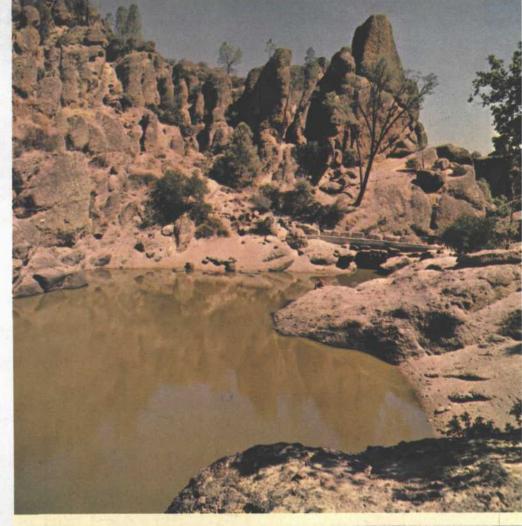
All photos by the author.

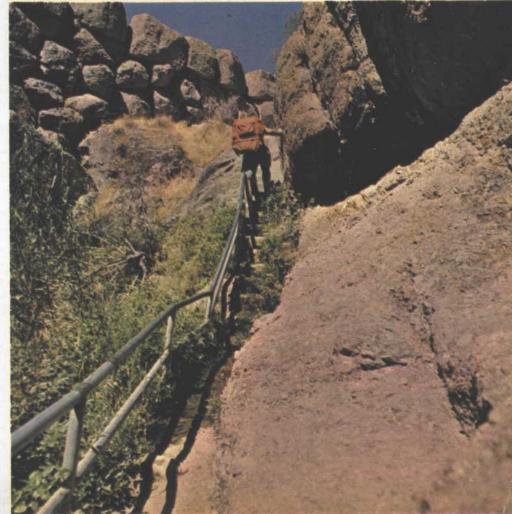
wise to abandon his central coast haunts and beat a hasty retreat farther south to the Los Angeles area. But bad luck and justice were catching up to California's outlaws. Less than two years later, Tiburcio Vasquez dropped through the gallows' trap in San Jose.

Legend has it that some of Vasquez's plunder still lies secreted away back in the dark corners of the caves. And if your trip takes you up near the craggy pinnacles, you won't want to pass up the chance to hunt for the lost loot.

To get to Pinnacles National Monument in central California, you have a choice of two routes-one from the east and one from the west. No connecting road runs through the monument and since the visitor center and main facilities are on the east or "back" side, most agree that this (via Highway 25) is the best way to enter. Driving from the north, you'll pass through Hollister; from the south, through King City. Incidentally, check your food and supplies here. There are no stores or gas stations in the Monument. The nearest provisions are at Paicines General Store-23 miles outside. (Paicines is actually the site of the Tres

> After winding and crawling through the darkness of the Bear Gulch Caves, one last set of stone steps leads out into the welcome sunlight and the reservoir above.









A covered garbage can presents little problem for this raccoon as he searches for his evening meal.

Pinos Massacre. Due to some later railroad shenanigans, Tres Pinos was shifted four miles north to its present location. The buildings lingering behind were renamed Paicines.)

Chalone Creek Campground, about a half mile inside the entrance, has sites for tents, pickup campers and trailers. Chalone Annex across the road is open to organized groups with prior reservations. Over on the western side, the route enters from Soledad and U.S. 101 over a narrow oiled road through Shirttail Canyon—inaccessible to trailers. It deadends at Chaparral Campground.

Don't leave food containers or ice chests outside when it gets dark—the bands of persistent raccoons that nightly prowl for handouts will carry away or gnaw through anything left loose. You'll want to shoot some pictures of the masked bandits so be sure to bring along flashbulbs. Then just wait for evening and you'll have a score or more of raccoons for models.

When morning comes, you'll want to go exploring and the best place to start is the visitor center. Inside is the geologic story of Pinnacles. Some 30 million years ago this was volcano country. The ground shook with quakes, dense smoke blackened the sky, eruptions belched and blasted from vent holes and lava flowed out thick and firey. Eight thousand feet into the scorched air thundered the main volcanic cone; nearly a mile higher than North Chalone Peak, the highest point in the Monument today. But gradually as the eons passed, the volanic activity subsided and then erosion and faulting began carving the remains into the Pinnacles of today.

Splinter cracks from the nearby San Andreas Fault caused great fractures in the rocks. Water seeped into the joints, dissolved the minerals, separated blocks of rocks and cracked and tumbled large chunks from the mass. Eventually only the jagged and eroded spires remained, looming gaunt and bare above the rolling hills of the surrounding countryside.

Just down the road past the visitor center, the pavement ends at the Bear Gulch



picnic area. Here trails begin to the various parts of the Monument. You can leave your car in the parking lot or even pause for a picnic lunch in the grove of live oak trees along the stream. Before you take off on your hikes, ask at the visitor center for their checklists on flowers and animals so you can compile your own souvenir record of your walks.

The main trail from Bear Gulch leads up to the caves and the damp hideout of Vasquez. Since there are no historical markers here your guess is as good as any when it comes to locating just where he camped. Like the Old Pinnacles Caves situated on the west side of the Monument, the Bear Gulch Caves aren't caves in the usual sense of the word but instead are talus-type caves — a labyrinth of jumbled boulders wedged into the narrow gorge. Long ago earthquakes tumbled the massive rocks down from above. They lodged in the canyon, many forming a roof over the stream below. Eventually covered over by ages of eroding rocks and soil, the boulders now completely bridge the area and shut out the lightleaving a darkened maze for you to squeeze, crawl and grope your way through.

As you start up the trail to the caves, take a copy of the Trail Guide from the pamphlet box. Various plants and other attractions are described in the leaflet

and number-keyed to markers along this short nature walk. A little way up the path, the caves' trail branches off of the nature trail to join again at the reservoir on top. At this point, it's handier to proceed up through the twisting and turning caves and then come back on the nature trail. But don't try the caves without a flashlight!

Clambering through the darkness of the caves, you'll climb several sets of stairs, twist around jagged corners and crawl on your knees through tight passages as you follow along the trickling stream that leads up and out into the sunlight once again. Scramble up one last set of steps carved out of the rock and you're standing alongside the reservoir. After you rest here on the bridge and admire the craggy outcrops around you, you can backtrack on the nature trail past Moses Spring to the parking lot. The round trip is 13/4 miles.

If the day is young and sunny, you'll probably elect to hike some of the other trails. From the Bear Gulch area, trails branch off to the fire outlook station on North Chalone Peak (round trip, 9 miles) and to the High Pinnacle Rocks (round trip, 5 miles).

On the trail to North Chalone Peak, you'll learn why Pinnacles is described as having the best example of chaparral habitat in the National Park System. From the fire outlook you can gaze across the miles of rolling hills that lie smothered under the pigmy forest of manzanita, buckbrush, hollyleaf cherry and greasewood. Since the Monument was established in 1908, and natural wildfire with its clearing effect was suppressed, the chaparral has become so dense and snarled that deer, rabbits and other native animals are literally being forced out and declining in number. Controlled burns are expected (similar burns are being used in Sequoia National Park) which will open the area to new plant growth and incoming animals.

On the High Peaks Trail you'll hike through the most scenic crags in the Monument and look down on the fardistant Chaparral Campground on the west side. Deer are prevalent here as are the more nocturnal gray fox and bobcat. Less common and very rarely seen are mountain lions which sometimes take up dens in the high peaks. Over your head will glide turkey vultures as you near their nests in the inaccessible rocks.

The sparse pines growing here are digger pines, the only pine that can withstand the blazing summers of Pinnacles when the temperatures continually registers over 100 degrees.. Even when the scorching sun begins to wilt the tough chaparral, the digger pine, with its roots that can reach a length of 150 feet, finds enough moisture to keep itself seemingly unaffected.

Since the summer sun discourages many from coming to Pinnacles, the most popular times for visiting are fall through spring months. In fall, the rains cool off the trails, settle the dust and cover the hillsides with fresh grass. Winter is so fleeting that it hardly occurs at all. The spring gets underway in January with the pink and white blooms of the currants and gooseberries and the bright red of the Indian paintbrush. By March, the flowers are in full bloom with their saturated colors brightening the landscape. Meadows sparkle in the sunshine and the streams are dashing once more at breakneck speed through the echoing caves.

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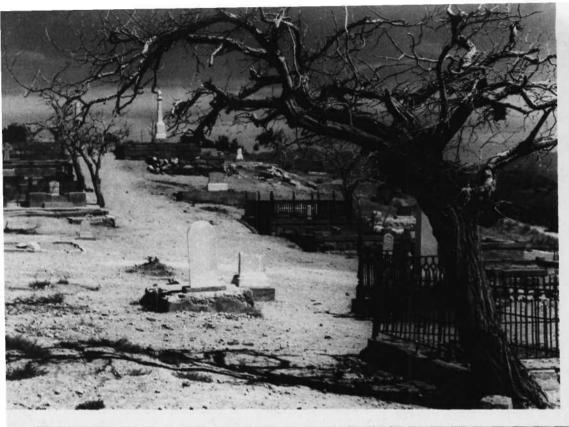
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Rusting carts and crumbling walls (right) are all that remain of the one prodigious mining venture. Many of the miners who worked in the tunnel are buried in the old cemetery (left) in Virginia City.

All photos by author.

by Alexander H. Waterman

### TUNNELTOOBLIVION

A FEW MILES below Virginia City, Nevada, site of the fabulously rich gold and silver ores of the great Comstock Lode, lies the ghost town of Sutro, now a fast fading landmark closely connected with the colorful history of the mines.

Located on the Old Emigrant Road along the Carson River and near the Pony Express station of Dayton, the town was named for its founder, Adolph Heinrich Joseph Sutro. Born in Aachen, Prussia on April 29, 1830, he had come first to New York and then San Francisco by way of the Isthmus of Panama, engaging in the tobacco business and as a supplier of various items to the mines of the Mother Lode area during the great Gold Rush of 1849.

By 1859 California was in the midst of a recession, the cream having been skimmed from the more easily accessible placer beds of the streams and creeks and 18,000 miners had departed for, what were rumored to be, rich placers along the Fraser River in British Columbia, making quite a dent in California economy at the time.

News of the Nevada strike at the Ophir mine on the north end of the Lode quickly traveled to California, creating great excitement in 1859. Ore samples showed a value of \$3876 to the ton; three-fourths silver and one-fourth gold.

That fall the Ophir shipped 38 tons of ore yielding \$112,000 over the mountains by mule and wagons to San Francisco and when the Central mine shipped 20 tons that grossed \$50,000 the rush was on. Reports were regarded by some as almost too good to be true, but Sutro was curious.

In 1860 he crossed the Sierra for an analytical on-the-spot inspection of the new camp. Well educated, aggressive and a man of tremendous energy, he was a persuasive talker and writer, destined to become one of the most controversial figures in the history of Virginia City.

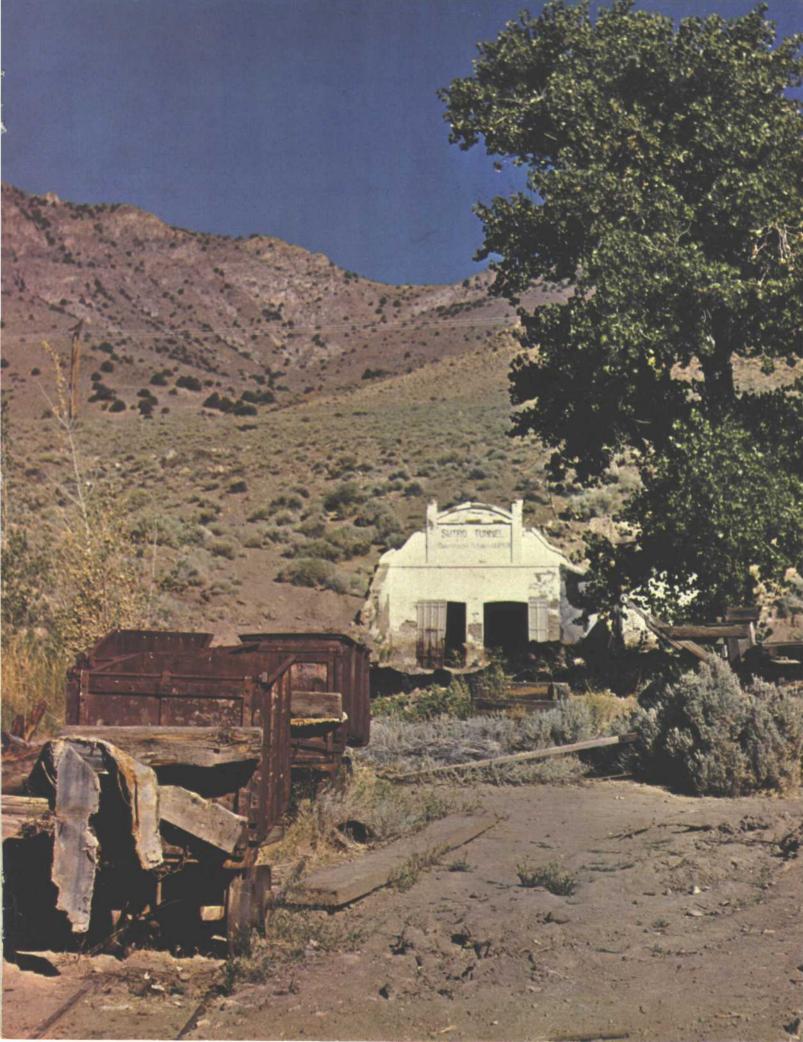
Sutro entered the mining business by setting up a mill near Dayton, a former Pony Express stop, along the Carson River in 1863. He obtained a lucrative contract with the Gould & Curry' mine to process ore, but late that year his eight-stamp mill burned to the ground

temporarily putting him out of business. As a keen observer of mining operations on the Lode, however, he was soon to be back in action.

Flooding of the mines by underground water had become increasingly trouble-some necessitating the installation of expensive imported pumping equipment. Mining companies had discussed the need for the construction of a deep tunnel to drain all of the mines on the Lode, but were unable to get together.

To Sutro, the idea seemed entirely practicable and a sensible solution to the enormous expense problem of pumping and lost time. He at once became an ardent advocate for the tunnel and proceeded to push plans for the project with his accustomed vigor, applying for a franchise which was granted by the Nevada legislature on February 4, 1865 giving "A. Sutro and his associates" an exclusive franchise to construct and operate the tunnel for a period of 50 years. The enterprise had the enthusiastic support of all the mines and the Bank of California.

On July 25, 1866 Congress passed the



Sutro Tunnel Act granting the company the right to construct the tunnel, giving it the exclusive ownership of all lodes and ledges discovered along its course for 2,000 feet on each side for a length of seven miles with the exception of the Comstock Lode. Prospects for finding ore along the route of the tunnel were thought to be good. The enterprise appeared to be solidly based for financial promotion and Sutro held the controlling stock interest.

Twenty-three of the leading mining companies had entered into an agreement to pay the tunnel company a royalty of \$2 on every ton of ore extracted by each mine, after the tunnel began to drain it. Mines were given the right to use the tunnel to transport men and supplies at specified rates.

The tunnel was planned to tap the Lode at a depth of 1750 feet. Dimensions were, inside of timbering, height 7½ feet, width at top 8 feet and width at the bottom 9½ feet. Drainage water was to flow through a covered channel beneath the tracks for the ore cars, drawn by mules. Four ventilating shafts were to be sunk along the course of the tunnel at 4,000 foot intervals, but only two were completed.

Now Sutro was to run into trouble that plagued him for several years and almost ruined his tunnel project entirely.

Since the formation of the San Francisco Stock and Exchange Board on September 11, 1862, providing a market for mining stocks, the wildest sort of speculation was rampant. William Sharon, a powerful figure in the Bank of California and some of his wealthy and influential associates were heavily interested in the Comstock mines. Circulation of false rumors, pool operations and "rigged markets" were the order of the day. By means of such operations, and loans made to the mining companies during the hard times of 1864 and 1865, Sharon and some of his associates had come into control of most of the leading mines on the Lode and seventeen of the mills. They now were known as "The Bank Crowd."

There was fear among this group that a successful tunnel operation might put Sutro in a position to wrest some control from them. They seemed more interested in manipulating the market for a "killing" than in the economical draining and operation of the mines. A bitter verbal

Old stamp mill, tunnel portal and a few buildings are all that remain of Sutro's mammoth mining project.

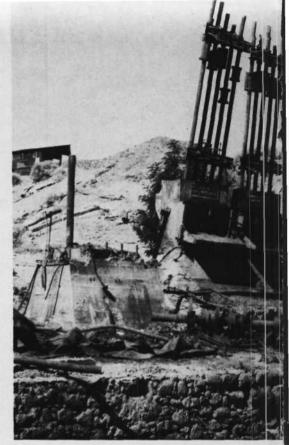
feud developed between Sutro and Sharon with Sutro denouncing his questionable methods at every opportunity. Sharon, by virtue of his bank connections and influential associates was able to thwart Sutro's efforts to raise the necessary capital for his enterprise both in the West and the East, retarding the start of the tunnel for several years.

Sutro anticipated no great difficulty in raising the necessary \$3,000,000 capital in the East, but the New York money men, aware of the recession at the mines, advised him to first get subscriptions for \$500,000 in the West. Returning to the Comstock, Sutro obtained subscriptions for \$600,000 from eleven of the mining companies, but was turned down by the other twelve. Somewhat frustrated, Sutro traveled to Washington and was persuasive enough to induce members of the House to introduce two bills to provide funds for the completion of the tunnel, but both failed to pass.

Under prodding from the bank crowd a steady flow of criticism had been directed against Sutro and the tunnel project. To make matters worse, Sutro had stated publicly that eventually he and his tunnel would dominate the Lode with all mining being done through the tunnel, reducing Virginia City to the status of a ghost town. Opposition of the mining companies was aroused immediately by this burst of egotism.

The tragic fire of April, 1869 took the lives of 37 miners in the Yellow Jacket mine and Sutro seized the opportunity to point out that, had his tunnel been in operation, smoke ventilation and a means of escape would have been provided. So convincing was he that the Miners' Union subscribed \$50,000 and the tunnel was started in October of 1869, four years after the franchise had been granted.

A community of workers began forming at the portal to the tunnel which developed into the town of Sutro with a population of which about 400 were tunnel workers. Today nothing much remains with the exception of the tunnel portal, a mule and horse barn, several old frame buildings and the ruins of a stamp mill.



Meanwhile, some newspapers continued a vicious attack on Sutro. The Gold Hill News of September 27, 1869 called his tunnel enterprise a "bare-faced swindle" and again on October 13, 1869 referred to the tunnel as "Sutro's Coyote Hole."

Toward the end of 1870 ore bodies on the Lode diminished and the Comstock was in a slump. Sutro was in need of more money and the tunnel had been driven for a distance of only 1,750 feet. A great ore body discovered below the 1,000 foot level by the Crown Point mine at the end of the year put new life into the Comstock and Sutro as well.

With the assistance of his agents Sutro now succeeded in selling 200,000 shares of stock for \$650,000 to McCalmont Brothers & Co., a London banking firm and another subscription for \$800,000 from European sources was obtained. Returning to the Comstock, Sutro now devoted all of his time to the completion of the tunnel, in a race to reach the Lode before the ore bodies were exhausted.

A great disappointment to the tunnel company was the fact that no ore of any value was found along the route to the Lode and expenses had been heavy.

The tunnel reached the Savage shaft on the Lode September 1, 1878, the total length being 20,498 feet or 3.88 miles, thirteen years after the franchise was



granted, and against the formidable opposition of Sharon and the money crowd, political figures under their influence and many of the mines under their control.

As it turned out, most of the great ore bodies had been largely exhausted oncompletion of the tunnel at this late date, and many mines had sunk shafts far below the 1,750 foot level to find no ore of any value.

Although Sharon and his associates had been largely successful in thwarting Sutro's efforts to complete the tunnel at an early date, many millions of dollars had been expended needlessly in lifting ore from great depths all the way to the surface when it could have been removed through the tunnel at the 1,750 foot level. Water could have been drained down to this level and lifted from greater depths only up to the tunnel.

In 1879 Sutro quarreled with the directors of the tunnel company who proposed a compromise with the mines reducing the royalty on removal of ore from \$2 to \$1 as ore values dropped at that time, but the compromise was carried through and Sutro resigned shortly afterward. The tunnel company then drove north and south laterals along the Lode to drain the mines then operating. The mines advanced \$70 a foot for this work and an estimated volume of 4,000,000 gallons daily was drained.

For the next several years the Sutro

Tunnel Company operated on an unprofitable basis until substantial quantities of lower grade ore were discovered, increasing royalties to the company. At that time, the mortgage holders, McCalmont Brothers & Co., sued to foreclose, showing an amount due in principal and interest of \$2,023,833 of which they are said to have received, on a compromise, \$1,000,000 when the property was sold on foreclosure in 1889. With the exception of this amount, no part of the cost of the tunnel was ever repaid. Many of the old stockholders formed a new company called the Comstock Tunnel Company called the Comstock Tunnel Com-

pany and took over the property.

Meanwhile, Sutro had gradually disposed of his large block of stock and the price had declined from \$6.50 to 6¢ a share. He retired to San Francisco, a millionaire, to successfully conduct a real estate venture in that city. He was elected mayor of San Francisco in 1894.

Few men could have battled the rugged and almost insurmountable opposition of the unscrupulous Sharon and his associates as did Adolph Sutro in driving his tunnel to completion at the Savage mine shaft on the Comstock, He died in 1898.

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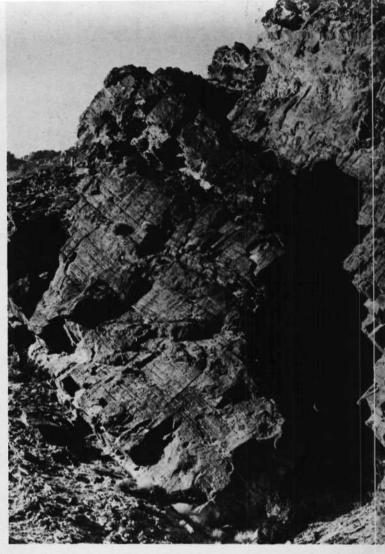
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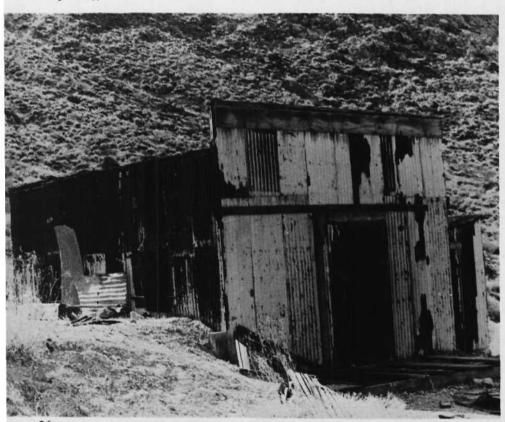
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# DEATH VALLEY'S TITUS CANYON

by Betty J. Tucker



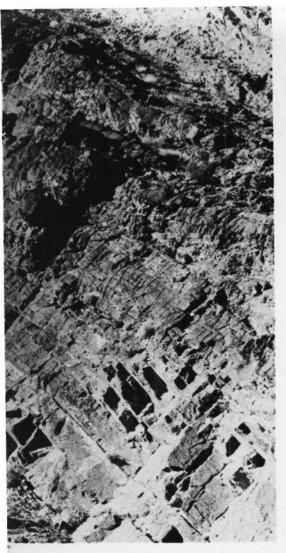
The calico-banded upthrusts in Titus Canyon (right) are of great interest to geologists. Old corrugated tin building in Leadville is thought to have been the post office.



THE ROAD and scenery through Titus Canyon in Death Valley produces all the ups and downs of a young love, then steadies out into the young matronly area. Further on, it matures and gains the stature of sedate old age.

That's a pretty good life span for a mere 25 miles. The only problem is that occasionally heavy rains rip out the road, so be sure and check with the rangers. Trailers cannot be taken on this road and I wouldn't recommend trucks and campers, although we saw one go through. At times the high center of the road forces you into some creative driving. We did it in a dune buggy.

The road into Titus Canyon leaves the Beatty Road and crosses the desert between the Bullfrog Hills and the Grapevine Mountains. Then it begins to climb. This road is one way and it is easy to see why. The steep uphill grades and sharp hairpin curves are not conducive to meeting oncoming traffic. There was that thrill of a first young love—the frightening steepness and sheer drop-offs, but still so breathtakingly beautiful that I



wasn't even afraid. The dune buggy has such a short wheel base it takes the sharpest corners with ease.

After cresting at Red Pass, elevation 5,250, we dropped down into a beautiful green valley. Here, nestled comfortably in yellow flowered Brittle-bush was the ruins of Leadfield.

This town was the brain child of C. C. Julian who could have sold ice to an Eskimo. He wandered into Titus Canyon with money in mind. He blasted some tunnels and liberally salted them with lead ore he had brought from Tonopah. Then he sat down and drew up some enticing maps of the area. He moved the usually dry and never deep Amargosa River miles from its normal bed.

He drew pictures of ships steaming up the river hauling out the bountiful ore from his mines. Then he distributed handbills and lured Eastern promoters into investing money. Miners flocked in at the scent of a big strike and dug their hopeful holes. They built a few shacks. Julian was such a promoter he even conned the U. S. Government into building a post office here.

So for six months, August, 1926 to February, 1927, over 300 people lived here and tried to strike it rich. They dug and lost.

What remains of this fiasco is rather amazing to behold. It most certainly looks like the ghost of a prosperous mine. The false-front, cream-colored, corrugated tin post office is still in good shape. There is a built-in wooden desk and some small shelves on the walls. Up a narrow trail there are two more lime green corrugated tin buildings.

Near it is the blacksmith's building. The wooden block that held his anvil is there as is the bin full of coke. Both of these buildings are lined with asbestos. There are several small holes where the miners tried to find the promised ore, plus a couple of rather large shafts.

Two and a half miles below Leadfield is Klare Spring, the major water supply for the town. Miners took their infrequent baths here and hauled water back to camp. Beside the spring you will find Indian petroglyphs.

We sat on a couple of sun-warmed rocks and had a snack. The water trickled by and a couple of ravens performed a spectacular air ballet for us. It wasn't easy to remember that Titus Canyon got its name through a tragedy.

In 1907, Morris Titus, a young mining engineer, and two of his friends, Mullan and Weller, left Rhyolite intending to cross Death Valley and do some prospecting in the Panamints. They found the water hole dry that they had hoped to use. They had only 20 gallons of water for themselves, 19 burros and two horses. Eventually they found a hole where they could get a cupful every four hours. While Mullan and Weller waited, Titus took half of the stock and went to look for more water. He never came back. Next day Weller took the remaining stock and set out to look for Titus. He, too, disappeared. Mullan was found a month later and taken to Rhyolite, more dead than alive. As Titus was known to carry large quantities of gold with him, his family instigated an extensive search. No sign was ever found of him. Some thought he might have broken through a salt crust and gone into the mire below. Whatever happened, he has a most beautiful monument in having this particular canyon named after him.

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### Calendar of Western Events

MARCH 26-28, 15TH ANNUAL PALOMAR GEM & MINERAL SHOW, Escondido Village Mall, Escondido, Calif. Free parking and admission. Complete show including demonstrations and lapidary work.

APRIL 3-8, SHOSHONE THIRD ANNUAL DESERT ART SHOW, Shoshone, California. For information on entry fees, space, prizes, etc., write to Desert Art Show, Shoshone Calif. 92384.

APRIL 3 & 4, SAN JOAQUIN GEM AND MINERAL SHOW, San Joaquin County Fairgrounds, Stockton, Calif. Complete show, including artifacts. Admission 50c, children 25c.

APRIL 3 & 4, SPRING PARADE OF GEMS sponsored by the Needles Gem & Mineral Club, High School Gymnasium, Needles, Calif. Admission free. Field trips, dealers, bottles and insulator exhibits, special and competitive exhibits.

APRIL 9-11, PARADISE GEM & MINERAL CLUB'S 17TH annual show, Veteran's Memorial Hall, Paradise, Calif. Complete show, including Indian arrowhead making, field trips, etc. Free parking and overnight trailer parks available.

APRIL 10 & 11, NORTHSIDE GEM AND MINERAL CLUB'S first annual show. Bliss, Idaho.

APRIL 11, ANNUAL EASTER SUNRISE SERVICE, Red Rock Canyon State Park, 25 miles north of Mojave, Calif. Services begin 5:30 A.M. Parking for busses, campers, etc. Public rest rooms.

APRIL 17 & 18, OXNARD GEM AND MINERAL SOCIETY'S 4th annual show, Oxnard, Calif. Community Center. Free admission, parking and camping area. Complete show.

APRIL 17 & 18, THIRD ANNUAL DELTA NOMADS "Cave City Carnival" near San Andreas, Calif. Four-wheel-drive family event. Write John R. Arellano, Rte. 1, Box 70A, Oakley, Calif. 94561.

APRIL 23-25 & APRIL 30-MAY 2, AUDU-BON INSTITUTE OF DESERT ECOLOGY sponsored by the Tucson Audubon Society and University of Arizona, Tanque Verde Ranch, east of Tucson, Arizona. Outstanding naturalists conduct lectures and field trips. For information write for free brochure: Audubon Institute, 2504 East Lee, Tucson, AZ. 85716.

APRIL 23 & 24, CALIFORNIA STATE OLD TIME FIDDLING CONTEST, Veteran's Memorial Hall, Oroville, Calif. Write Box 1093, Oroville, Calif. 95965.

APRIL 24 & 25, YUCAIPA VALLEY GEM & MINERAL Sixth annual show, Community Center, First Street and Avenue B, Yucaipa, Calif. Free admission and parking.

APRIL 24 & 25, ARROWHEAD MINERAL-OGICAL SOCIETY'S annual exhibit of minerals and gems, USWA Hall, 9460 Sierra, Fontana, Calif. Complete show, new, expanded quarters. Free parking and admission. Write Lloyd Finch, 6782 Valley Drive, Riverside, California 92502.

APRIL 24 & 25, ANNUAL RIVERSIDE COMMUNITY FLOWER SHOW, Riverside Municipal Auditorium, 7th & Lemon Streets, Riverside, Calif. Home and garden tours, workshop programs. Admission \$1.00, children with parents free.

APRIL 30-MAY 2, NATIONAL FOUR-WHEEL-DRIVE GRAND PRIX, Riverside, Calif. General admission \$3.00. Write P. O. Box 301, Fullerton, Calif. 92632.

MAY 1 & 2, NATIONAL TURTLE RACES, Joshua Tree, California. The 26th year of this event in which anyone can enter a turtle or tortoise in the competition, adult or youngster. Entire community participates in the festive weekend. Joshua Tree is approximately 30 miles north of Palm Desert.

MAY 1 & 2, 17TH ANNUAL FAST CAM-EL CRUISE sponsored by the Sarrea Al Jamel 4WD Club, Indio, Calif. For location and information write Paula Ford, P. O. Box 526, Indio, Calif. 92201.

MAY 1 & 2, JOSHUA TREE GEM AND MINERAL SOCIETY'S "Tailgating Event" in conjunction with the JOSHUA TREE ANNU-AL TURTLE RACES, Joshua Tree Sportsmens Park, four blocks north of Highway 62. Write Les Lesaulnier, Star Rte. 1, Box 25, Joshua Tree, California 92252.

MAY 1 & 2, TOURMALINE GEM AND MINERAL SOCIETY'S 21st annual show, Helix High School, 7323 University Ave., La Mesa, Calif. Non-competitive, no dealers. Write Russ Bope, 7263 Blackton Dr., La Mesa, California 92041.

MAY 15 & 16, SAN JOSE ANTIQUE BOT-TLE COLLECTORS Fourth annual show and sale, Santa Clara County Fairgrounds, 344 Tully Road, San Jose, Calif. Admission free, overnight camping. Write Louie Pellegrini, 145 Pine Lane, Los Altos, Calif. 94022.

MAY 15 & 16, GLENDALE LAPIDARY & GEM SOCIETY'S Festival of Gems, Glendale Civic Auditorium, 1401 N. Verdugo Rd., Glendale, California. Complete show, free admission and parking.

MAY 15 & 16, ANTIOCH GEM AND MINERAL SHOW, Contra Costa County Fairgrounds, Antioch, Calif. Complete show. Admission 50c. Write P. O. Box 91, Antioch, California 94509.

MAY 29-31, JIM BUTLER DAYS, Tonopah, Nevada. Rockhound Roundup, Antique Bottle Show, Dune Buggy Races, guided gem trips, rock swaps and other family events throughout the weekend. Free camping, free admission. For detailed information write Howard Butler, P. O. Box 606, Tonopah, Nevada 89049.

### Gold in Central Park!!

by Jack Pepper

A N ARMED Arizonian recently invaded New York City's crowded Central Park in broad daylight and got away with \$250.00 in loot. As a matter of fact, he was even aided by police as he gathered the money during a three-week period.

He was dressed in conservative business clothes and his "weapon" was a "New West" metal detector. From an article in the New York Sunday News, he evidently caused as much commotion as he would if he had been wearing frontier clothes and packing a six-shooter.

It seems blase New Yorkers are a bit naive concerning metal detectors. One spectator even asked if the detector "was one of those gadgets for getting worms out of the ground!"

Robert D. Lynn is a field auditor for the City of Phoenix and a long-time member of the Arizona Treasure Hunters' Club, spending most of his free hours roaming the back country.

When he went to New York City to attend a national conference of auditors and accountants, at the last minute he decided to take along his detector.

"I really didn't have any specific reason in mind," Lynn explained. "Maybe I vaguely thought of trying the Atlantic Coast beaches. But when I saw Central Park and all those people, I figured it would be a fertile hunting area."

Being a law abiding citizen, Lynn checked with the New York Police Department and the Division of Parks before heading for the new hunting grounds. Extending for many square blocks up the center of Manhattan, Central Park is surrounded by cement buildings and is the only public green grass available to city dwellers. It is used for both summer and winter recreation by hundreds of thousands of people a year.

At first suspicious, the law men of New York were cooperative after the westerner explained how his metal detector worked and that he would not dig up their park. When they thumbed through the hundreds of rules and regulations governing Central Park and—to



Robert Lynn, 55-year-old Phoenix, Arizona accountant (left), shows his brother-in-law, Jack Frost, a toy gun and \$250 in coins he found in New York City's Central Park with his White's TR66 metal detector.

no one's surprise—there was not one restriction on metal detectors, they gave him a permit.

"When I first started using the detector in the park I was ignored, but soon curiosity got the best of the people and within a half hour I was being followed by a couple of dozen spectators," Lynn said. "And when I dug up my first coin, I really started having a gallery. From then on I spent half my time metal detecting and the other half answering questions."

When not attending the seminar, Lynn would wrap his detector in newspaper and take the subway to Central Park, using subway tokens he had found in the park as his subway fare.

"The first time I carried the detector on the subway I was stopped by a guard who thought it might have been a bomb so after that I wrapped it in newspaper."

When he returned to Phoenix, Lynn had \$250.00 in coins—some worth more than their face value—and an assortment of jewelry. Not a bad haul for an Arizonian who invaded the big city.

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### CALIFORNIA

### Afton Canyon, San Bernardino County

During the heavy rains of February, 1969, the Mojave River ran from wall to wall in Afton Canyon. It washed out several miles of the railroad tracks and swept away the fine stands of willows throughout the canyon. Since then, the Bureau of Land Management has built an earthern dike to protect the campground from floodwaters. The dike crosses the entrance to Pyramid Canyon and causes the river water to impound to form a shallow pond.

In order to reach the road leading up Pyramid Canyon to the gem collecting locations, it is necessary to ford a short section of the pond under the bridge. Care should be exercised when attempting a crossing. The depth of water will vary with the season and the amount of snow pack at the head-waters. In October 1970, the pond was of good size, but less than a foot deep. This crossing will probably be in passable during the period of spring runoff.

### Death Valley Junction, Inyo County

An unimproved, overnight campsite has been provided for visitors in this area. It is located across from the adobe complex which houses the hotel and Amargosa Opera House. As yet, there are no facilities except litter cans. A talk with Don Martinson, town manager, disclosed plans are in the formative stage to improve the camp area.

Of special interest to the fair sex—a laundromat was due to open in November and, believe it or not—you can have your hair styled in the latest fashion in this little settlement which doesn't even have a grocery store! T. J. Ryan, formerly of Los Angeles, has opened a beauty shop.

### Owens Valley, Inyo County

Nature lovers will enjoy the new Tule Elk Viewpoint along Highway 395, 8 miles south of Big Pine. The Tule Elk are on the rare species list and three-quarters of the surviving former vast herds will be found at the refuge in Owens Valley. The best viewing time is the early morning hours from July through October.

### Western Mojave Desert

As this is being written, heavy storms have hit the high desert with snow blanketing the mountains and valleys of the Western Mojave. Generally, such large amounts of moisture indicate a fine bloom of spring wildflowers in the Antelope Valley.

The Wildflower Visitors Center in Lancaster, sponsored by the Chamber of Commerce, will be open from March 21st to April 25th on Thursday, Friday, Saturday and Sunday, 10 a.m. to 4 p.m. Information, maps and displays will be available for the enjoyment of visitors. Additional information may be obtained by writing to: Lancaster Chamber of Commerce, 44943 N. 10th Street West, Lancaster, Calif. 93534.

### Mint Canyon, Los Angeles County

The Mint Canyon campground has been closed by the U. S. Forest Service. Heavy use of this campground has necessitated its closure due to the compaction of the soil to the extent that vegetation is no longer maintaining a soil cover. In recent months, a decline of rigor has been noted in the large oak trees throughout the area. If conditions were allowed to continue, the trees would die. This prompted the closing of the campground. Plans are underway to improve the soil condition. With proper treatment, it is hoped the campground will recover in a few years.

### A Welcome Sign

Have you noticed the new sign "Campers" on California highways? This is the new method being used by the State Highway Division to direct recreational vehicle drivers to overnight campsites. The parks qualifying for this sign must be licensed or government operated; within 10 miles of the highway exit; provide power, water and sewage disposal; have a minimum of 24 spaces capable of handling all types of recreational vehicles; and be open 24 hours daily.

### **NEVADA**

### Historical Markers

The State of Nevada has an excellent program of marking its historical sites. Each marker gives a brief history of the locale so honored. This adds immeasurably to the visitor's enjoyment as he travels through the state. The markers are well posted. Stop and read them—you will learn many interesting facts and may find you will want to visit some of the sites.

Candelaria and Metallic City (also known as "Sin City" in its day) will be honored with marker #92 on Highway 95, 15 miles north of Coaldale Junction, at the turnoff to the old camps. Discovery of silver in 1864 brought the towns into existence and by 1880 they constituted the largest population center in a major portion of the state.

### Rest Areas

The State Highway Department has completed a new roadside rest in East Ely. This brings to 14 the number of improved and modernized rest areas along the major highways. The well-known and heavily used Millers Rest Area has been rebuilt with shade covers, tables, grills and modern rest rooms. Water is also provided. Millers is located on Highway 95 and 6, twelve miles east of Tonopah.

### Lathrop Wells, Nye County

A good, overnight rest stop is located just north of the settlement. Water, tables and sanitary facilities are provided. Limited supplies are available at the General Store. This is a convenient campsite when visiting the obsidianite fields.

### Coaldale Junction, Esmeralda County

Junction of Highway 6 & 95 North, 42 miles west of Tonopah. Jewel Parsons and her husband run the Coaldale Inn and Motel. Jewel has been here since the late 30s and has always extended a special welcome to rock collectors and visitors. At present, they do not have facilities for overnighters, but you are welcome to park your trailer or camper in the cleared area east of the Inn—free. If you aren't self-contained, you may use their facilities for a shower. While there isn't a grocery store, Jewel will provide emergency supplies from the cafe's stock. Ask at the bar.

### Fish Lake Valley, Esmeralda County

The Valley residents have erected a fine, overnight camping area for use of visitors. There are pull-through spaces plus water provided. The camp is located on Highway 3A, 16 miles south of Highway 6 (8.9 miles south of the Highway Maintenance Station). It is west of the highway with the entrance just north of the Community building.

The only services available in Fish Lake Valley are at the bar and gas station at Valley Center, 1 miles south of the campground. Limited supplies are available here. The business hours are variable. Have extra gas and groceries with you.

### Icthyosaur State Park, Nye County

The park and campgrounds are located some 25 miles east of Gabbs and are open all year. However, winter visitors pulling trailers should not attempt to drive the main road just north of Gabbs. A five-mile section of this route is through a steep, narrow, one-lane can-yon. During and following snow or rain storms, this section of the road becomes very slippery and there are no turn-around areas.

Visitors with trailers should use the Burnt Cabin Road, 4 miles north of Gabbs, across from the airport. This route is longer but trailers shouldn't encounter any problems. The route is well posted with directional signs. Park Manager, Richard King, stated a sign would be erected on the highway at the Burnt Cabin turnoff.

This is high desert country (6000 feet and up) and snow often covers all summits. The winter visitor would do well to check on road conditions at the Standard station in Gabbs.

### Off Limits

The old ghost town of Fairview, south of Highway 50 and east of Frenchman's Station, is now within a military reservation. Evidently, the bombing range has been extended as the road is now posted in no uncertain terms.

## PECULIAR PECCARY

by K. L. Boynton
© 1971

C LAD IN conservative salt and pepper grey, calm of outlook, unhurried in manner, the peccary is one of the desert's most solid citizens. Distinguished, too, in his way, for while he may superficially resemble a pig, he is definitely not one.

True enough pigs and peccaries trace

back to the same ancient ancestor; a piglike old character who adorned the scenery some 60 million years ago. And indeed, pigs and peccaries as late as 40 million years ago looked much alike. But they then began to diverge, going off in different evolutionary directions.

The pig tribe became long and narrow of skull, small of eye and very toothy. Their upper canine teeth curved up and out tusk-like, their back teeth developed complex ridges and furrows. Pigs became forest dwellers, rooting about under the trees, and escaping into handy underbrush when necessary.

The peccaries, on the other hand, took to the more open spaces. Highly vulnerable to pursuit, they became far better runners, with longer legs, fewer functional toes and speedier action. Their canines, instead of curving pig-style, point straight down and as they are sharp along the back edges, they slice like knives against the lower teeth. The molars of these animals are short and simple. Stomach-wise the peccaries are different, too, developing a food receiving and processing department almost as complicated as that of cud-chewers. Most important, these animals have their own peculiar way of looking at things that set them apart from pigs, and raise some interesting questions among animal behaviorists.

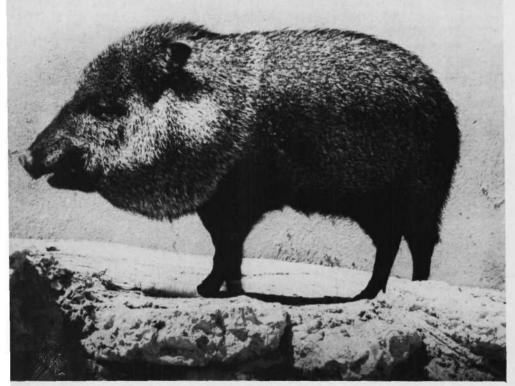


Photo by G. E. Kirkpatrick

Smallest of the hoofed mammals of the Southwest, the peccary (javelina), although resembling the domestic mammal, is not a true pig. He only attacks when cornered or provoked.

Today's peccary, ranging from the desert Southwest down into South America, is a compact animal, about 30 inches long, standing some 15 inches at the shoulder and weighing approximately 50 pounds. Short-sighted, he depends on his big ears and keen sense of smell for warning of danger. Alarmed or angry, he can suddenly look bigger, and hence more formidable, by an old skin trick handed down by his ancestors. The hair along his neck and back, normally lying flat, can be hoisted by skin muscles up into a thick mane and high crest the length of his body. Some six inches long and stiff, the standing hair makes him look taller and thicker. It also serves as a defensive foil, for an attacker is quite apt to bite short, getting a mouthful of bristly hair, and missing the flesh below.

A herd animal at heart, the peccary likes the company of his own kind, forming a sleeping, eating and socializing association of some 6 to 15 members, and most of their active day is spent searching for something to eat in a dry homeland famous for its short food supply. Zoologist Eddy, hearing loud complaints from Arizona stockmen that these animals ate what they wished reserved for their livestock, figured there was only one way to see how competitive peccaries are: find out exactly what they eat.

To get the complete picture, he selected three different sections in Arizona for investigation, each with its own type of vegetation and conditions. It was a season by season study so he would know how the feeding pattern varied with the



time of year and what was available to eat.

Using a spotting scope to locate the animals, he followed them on foot, observing them for hours through binoculars, and as close as possible. He even used a stop watch, recording the length of time the animals fed on each kind of plant, thus proving how important it was in their diet. Needless to say, he saw a lot of Arizona. He also got a first hand acquaintance with what a high desert can do in the way of summer heat and winter cold. But when he finished his study, he had the facts—right from the peccary's mouth.

In summer, the peccaries are up at dawn. They leave their nighttime bedding places under thick mesquite or palo verde, or in brushy arroyos, and shove off en masse for feeding grounds nearby. Eating is commenced with gusto, some feeding in small groups, some individually. Un-piglike, they like company when dining. If one finds something especially tasty, his grunts of approval bring others rushing to join him.

Cacti of various sorts are far and away the main items on the menu, prickly pear being the favorite. Fishhook and hedgehog cacti are also eaten; even the fleshy tissues of the trunk and joints of cholla, when other food is scarce. How they can eat this spiny stuff is a mystery, particularly with such obvious enjoyment, and how their insides process it is something still unknown. Being cacti fanciers is a great advantage for the peccary secures most of the moisture he needs from this food. Prickly pear is almost 88 percent water, and cactus fruits run some 65 to 75 percent. Cactus is also available in some form much of the year, many varieties fruiting in the hot July season, while the barrel cactus fruits early in the fall, and lasts well into winter. In locations where manzanita grows, the peccaries eat the berries; mesquite beans are tucked away whenever found, ditto those of the palo verde. In oak regions, the century plant is the year around mainstay, acorns being eaten in season.

Peccaries put in a lot of time rooting for food to be found underground. Equipped with an extra long, broad snout reinforced with bone, and run by heavy head and neck muscles, the dining peccary can even break up sun-baked soil. His nostrils, right at the snout's end, are handy for sniffing, and so well developed are the olfactory regions of his nose and brain, he can find unseen roots, tubers, bulbs strictly by their odor, not needing vegetation above ground to show where to dig. Rooting also turns up delicious snacks such as grasshoppers, crickets, beetles, insect eggs and larvae, which go immediately down the peccary hatch.

The summer morning feeding session goes on until the day's temperature reaches around 90 degrees at which time the herd retires to the shade of a brushy arroyo or into a canyon to loaf about, dust themselves, scratch and wait for the cool late afternoon for another feeding. Cooler fall weather finds them feeding longer stretches at a time. They are also active in winter, except in severe weather when, if possible, they retire to caves, which are cool in summer and warm up in winter.

Not satisfied with what he saw them eating, Eddy also did a lot of peering into peccary stomachs, and found by analysis that cacti was in 95 percent of those examined in the palo verde-bursage-cacti desert types of habitat. In the oak grassland, century plants made up the bulk in 96 percent of the stomachs. Contemplating all his findings, Eddy came to the conclusion that the peccary was being maligned by the stockmen; there was no competition between cattle and peccaries for the range.

Much of the peccary's success in desert living is due to herd solidarity, and some interesting ways have evolved down through the ages to achieve this day-in-and-day-out togetherness. One is by sound. Peccaries are a vocal lot, keeping in contact by various grunts whose tones are no doubt melodious to peccary ears.

Smell is another way the herd keeps together — a smell so musky and so strong that only a peccary can love it. The source of this perfume is a gland located on top of the peccary's back about eight inches in front of where the mini-tail is fastened on. Both sexes have it. Anatomist Epling did a careful dissection job and found that the gland setup is a very complex thing. It consists of an elevated nipple with a top opening that leads into a duct and finally into a sac, containing the odorous fluid. Oil glands and coiled tubular





Mother peccary and her babies. Photo courtesy of the Arizona-Sonora Desert Museum, Tucson, Arizona.

sweat glands are also in this vicinity, and surrounding the whole works is a bag-like container attached to skin muscles. When the spirit moves him, the peccary can squeeze down on the smellbag with his skin musles, and eject its musky contents-almost a foot in distance.

While to the human nose all peccaries smell alike, Zoologist Neal thinks their scent may be quite individual, and serves as a personal recognition factor, particularly when peccaries meet along a trail. Etiquette here demands that each rub his lower jaw along the back of the other and over the scent gland. The ensuing odor is apparently carefully noted before each goes his way. Scent also keeps the herd together as they go about their daily business. Feeding peccaries frequently stop to check up on each other smell-wise, and in traveling to and from the feeding ground, the adults rub their scent glands on low bushes in a form of trail marking, obviously useful for members far out of hearing and wishing to rejoin the others.

A quick release of musk by an alarmed peccary warns of danger. The news is quickly passed along until a herd of peccaries in full flight leave a great wave of smell in their wake.

For all his bristly appearance, the peccary is really a peaceful fellow, interested in his own affairs and by far preferring fleeing to fighting. Cornered, he is a dangerous and determined fighter. Three boxer dogs, known for their love of battle and disregard of consequences, mixed with a peccary. All

THERE'S A

had four-inch long scars on their necks and shoulders to show for it. Coyotes, more experienced with peccaries, avoid the adults, knowing full well that this placid looking animal is surprisingly agile on his feet; a fierce biter and slasher, and mighty handy with his hard

Clan sociability does not prevent shoving and quarreling when peccaries are elbowing their way to a waterhole in extremely dry weather. Fighting is at a minimum even when a lady's favors are

Continued on Page 42



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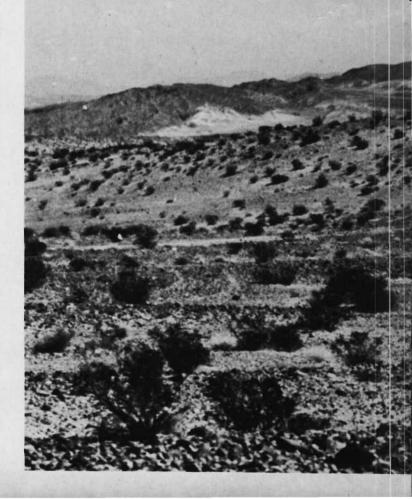
### AGATE in THE Alvord Hills

A California Field Trip

M ODERN MAPS do not show the Lower Mojave Valley and few people have heard of it. Yet, each year, thousands of travelers drive through the Valley on Interstate 15—the main artery from Southern California to Las Vegas, Nevada. Beginning at Yermo, and ending at Afton Canyon, this 25 mile stretch of desert valley might be called a barren and arid wasteland.

Its landscape is one of broad alluvial slopes rising leisurely to the mountains on either side. Rocky bajadas and deep washes dissect the western border while to the east great sand dunes have been piled against the mountain sides by violent winds. Only the higher peaks have escaped burial. Not even a Joshua tree—sentinel of the desert—breaks the monotony of this sea of detritus sparsely covered by elfin, drought-stricken creosote bushes. Here and there, in a ravine or

by Mary Frances Strong

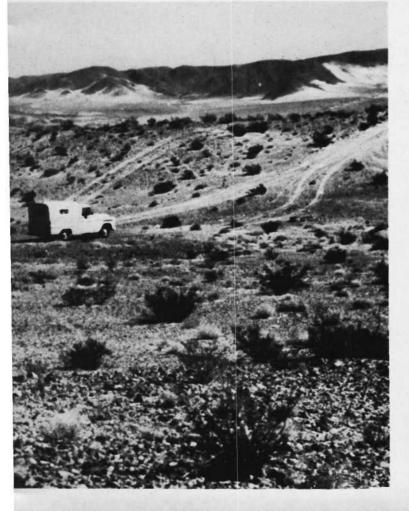


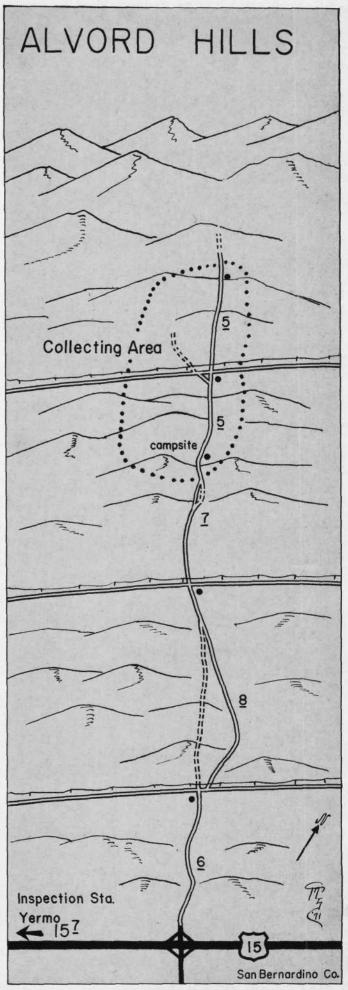
shallow depression, an occasional silveryleafed desert holly will be seen bravely fighting the elements to stay alive.

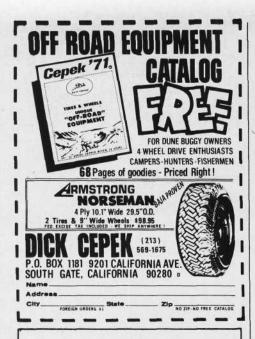
Though barren and desolate the Lower Mojave Valley may appear to be, it is a region of hidden surprises and exciting history. Through its length runs a river and it was once filled by a prehistoric lake along whose shores horses, camels and mastodons roamed.

The Valley has felt the wheels of covered wagons as pioneers traveled along the Old Spanish Trail; and it enjoyed the distinction of having a military camp built to protect them. Today, it is rich in excellent gem and mineral collecting areas. Of particular interest and within easy reach from a modern freeway, are the agates in the Alvord Hills.

The agate fields are reached by taking the Field Road offramp, approximately 15.7 miles east of the California InspecPhotos by Jerry Strong







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### COMPTON ROCK SHOP

1405 South Long Beach Blvd. Ph. 632-9096 Compton, Calif. 90221 tion Station on Interstate 15. Cross over the freeway and follow the good dirt road northwesterly into the hills (see map and road log for details). Two miles from the freeway, the road goes down into a shallow valley and the main collecting area begins. The valley makes an excellent campsite and offers a bit of shelter from the desert winds. The road and the collecting area continue for the next mile where the road climbs a ridge and eventually joins the power-line.

Agate, jasp-agate, jasper and petrified palm wood will be found as float on both sides of the road throughout the area indicated on the map. Here are great quantities of material in small sizes for tumbling and larger chunks for slabbing. There is also a considerable amount of leaverite. The collecting is easy—just a matter of walking and looking. Even the most discriminating rockhound should be able to pick up some colorful, good quality, cutting material.

There is a wide range of color and pattern to be found in the Alvord Hills specimens—pastel shades of pink, yellow, salmon, beige and dark brown, black and white. The most coveted material is the blood red, gem-quality jasper shot through with blue or white chalcedony. This material is known as "lace carnelian" and will cut into beautiful cabochons. The scarcest item is the petrified palm root. It is of brown color and can easily be overlooked, if the specimens aren't carefully scrutinized for "eyes." An occasional chunk of pertified reed may also be found. It polishes well to show the reed structure very effectively.

Looking east from the collecting area, the sand-covered Cady Mountains form the border of the Lower Mojave Valley and the course of the meandering Mojave River can be traced along the valley floor.





The river flows underground for many miles along its course, surfaces in Afton Canyon to run above ground several miles, then, once again, sinks into the sands.

During Pleistocene Time, a million years ago, the Mojave River flowed into the Lower Mojave Valley and formed Lake Manix. The climate was more humid then and this desert region is known to have supported considerable wildlife including horses, camels, mastodons, antelope and birds. The fossil remains of fish vertebrae and four species of fresh water mollusks have been found in the green beds of old Lake Manix. These, to-





gether with the uniform bedding and the green color, which is due to oxidation beneath water, clearly indicate the presence of a sizeable lake. J. P. Buwalda studied the deposits extensively. In the published report of his findings of 1914, he named the prehistoric body of water Lake Manix.

The Lower Mojave Valley was also part of the famed Old Spanish Trail. First recorded by John C. Fremont during his expedition of 1844, it apparently had been in use over a period of years prior to Fremont's journey. The portion of the route from the Colorado River to the San Gabriel Mission was a well-established Indian trail; traveled in 1776 by Padre

Fray Francisco Garces—the first white man to cross the Mojave Desert.

During the 1860s, the settlement of the Mojave Desert region began as the result of its division into townships and sections by the United States General Land Office. A journey along the Mojave Desert section of the Spanish Trail was not without danger from marauding Indians. Following attacks on travelers and miners, Camp Cady, with a complement of a hundred soldiers, was established in the Lower Mojave Valley-two miles southwest of the present-day railroad siding of Manix. It is now in ruins.

Doctors tell us that hobbies are the rejuvenators of man. If this be so-the Alvord Hills are the right prescription. They offer the rockhound an easy-to-reach area, removed from the noise of the main highway. It is a peaceful setting of low hills and broad horizons uncluttered by the litter of civilization. Except for three pole lines, there is little to mark man's encroachment.

The ample gem fields make the pursuit of the hobby rewarding. The air is clear and refreshing to breathe and the night sky glitters with a million sparkling diamonds. A special quiet covers the area with the comfort of a favorite blanket. Yes, the Alvord Hills in the Lower Mojave Valley are the Rx for good collecting, good camping and good fun on the Great Mojave Desert.

### **ALVORD HILLS LOG**

Mileages are not accumulative. Take the Field Road offramp on Interstate 15, at approximately 15.7 miles east of the California Inspection Station at Yermo. Cross over freeway.

- 0.0 Dirt road begins.
- Pole line road. Jog right and then left.
- 8.0 Cross 2nd pole line road.
- Reach little valley. This is 0.7 an excellent campsite. Collecting area begins.
- Cross 3rd pole line. 0.5
- 0.5 End of main collecting area.

This is a good dirt road and OK for cars and trailers.



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This baby javelina orphan was found and raised by an Arizona fish and game warden and then released when it could fend for itself. Cloyd Sorensen, Jr. photo.

### THE PECULIAR PECCARY

Continued from Page 35

at stake, mainly because there is no particular mating season, and breeding episodes can take place any time, usually with little fuss, and only as a slight interruption in the daily food-hunting routine.

Most young peccaries make their bows in the summer months, after a gestation period of about 143-148 days. Two to a litter is standard. Each weighs about a pound upon arrival, and their reddish brown fur is much softer than the adult pelage. Up and able to follow a few hours after birth, they are ready, willing and able to defend themselves. Their canine teeth are already in and well developed. and they have some incisors. Youngsters even only a day old are full of fight, and know just how to use their dental weapons. For the first month the youngsters live on milk, demanded by loud squeals. Gradually taking on solid food, they are weaned finally at about two or three months of age. By the time they are four months old they have the grizzled pelage of their elders and in fact look like minia-

Gentlemen peccary take no particular Gentlemen peccary take no particular interest in their offspring. Mrs. P, on the other hand, is a concerned mother, and her presence discourages experienced predators. Foolish youngsters who stray too far, are promptly picked off by bobcats, mountain lions and coyotes. Those who make it to adulthood join the herd, there being, according to peccary view, plenty of room in the big desert for anybody who knows how to take care of himself, and minds his own business.



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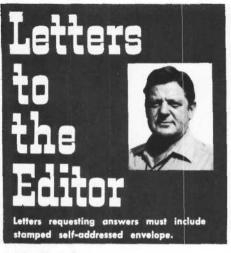
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### Let's Face It . . .

Relative to the letter by Wells Erthal in the February issue where he sees a face on the January issue cover, yep, the face is there and you don't need a reading glass. My husband says it looks like a skull.

> MRS. MARIE BRONSON, Pocatello, Idaho.

Regarding the letter about the face on the January cover, while you have a reading glass out look at the same picture 1-7/16 inches from the bottom and 1-7/16 inches from the left side. Also 1-3/8 inches from the bottom and 1-1/32 inches from the left. One face looks like a woman and the other a man. Also  $4\frac{3}{4}$  inches from the bottom and  $2\frac{3}{4}$  inches from the right side of the picture is the head of an animal, lying down.

I have had nothing stronger than coffee,

A. PAFFORD, Firebaugh, California.



### More Destruction . . .

On a recent trip to Inscription Canyon, approximately 20 miles north of Barstow, California, my family and I were very disappointed to find the petroglyphs destroyed by red paint, shotgun blasts and removal of the petroglyphs. This photograph of the sign at the mouth of the canyon shows the type of destruction. We hope it will remind people to stop this vandalism before it is too late and all areas of the West will be closed.

JOHN SQUIRE III, Yermo, California.

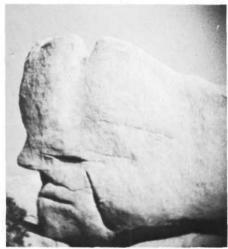
### Motorcycle Rampage . . .

During the Christmas Holidays I visited the abandoned marble quarry north of Victorville, California, 10 miles northeast of Stoddard Wells road. The visit was prompted by an article in the March, '70 issue of Desert Magazine.

The area was as interesting as the article promised. However, a discouraging incident was in progress when I arrived. In the valley below the quarry there was a congregation of what appeared to be one or more motorcycle clubs with a hundred or more people and bikes. The whole valley echoed with the sound of screaming and popping engines. Most of the riders were young and seemed ignorant of the fact that they were ripping up the top soil and small foliage since few were using the roads or trails.

It is unfortunate these people acquire such destructive habits and disregard for nature. The future of our beautiful deserts looks grim with the current attitude of such individuals who think the deserts are vast wastelands to be used as they see fit.

JOHN D. HANSEN. Riverside, California.



### Sour Puss . . .

In the February issue you urged readers to send in their imaginative photographic creations to Desert. "Ol' Sour Puss" was taken in Joshua Tree National Monument's Hidden Valley at almost the beginning of the trail.

> PAULO KRUCERO, Joshua Tree, California.

### No Secret . . .

I am thrilled with the January, '71 issue and the article Cachie's Last Secret. My father, John Martin, was a mining man at the San Marcus Mine about 1898 to 1902. He and his brother, Dr. Martin, of Phoenix, bought the Harquahala Mine and operated it until my father died in 1920. The peak in the photograph is Martin's Peak, named after my father.

GLADYS M. KRENZ, Arcadia, California.

### Gift Giver . . .

I have enjoyed reading your magazine for the last five years and have given it as gifts many times. Last week a friend asked me if I had read a certain article in the current issue. When I told him I only give it as a gift and buy mine on the newsstands everyone laughed and I looked kind of silly. So . . . here is my subscription. Thank you again for such a great magazine.

GRETCHEN ROWEN, Granada Hills, California.



### Mysterious Knocks . . .

In the February issue, I enjoyed the fine article Rock Art in Joshua Tree by Lois Wolf Buist. When I visited the area in May, 1970 I photographed John Lang's grave. Is the W. F. Keyes mentioned on the gravestone the same one in the Historical Map in the February issue?

We were alone in the park the day we took the picture. After leaving the Lookout Point on the top, we were spooked by three definite knuckle raps on the car. I told my friend it was John Lang's ghost objecting to our intrusion at his grave. She didn't believe it.

> MARGARET TROWBRIDGE, Wallingford, Conn.

Editor's Note: The Keyes who buried John Lang and the one in the map are the same. Keyes and Lang were long-time friends and prospectors. As for the knocks . . . who can say. . . the desert has many moods.

### Spring Flowers . . .

On the last page of March, '67, you give a chart of flower blooming periods. I'd like to add a little to that. In the higher Panamints, you will find the peak blooming period to be August. The mahogany trees from Thorn-dikes old camp to Mahogany Flats are in full bloom then and on the trail from Mahogany Flats to Telescope peak (8500 foot elevation up to the top of the meadows) is a riot of color—Purple Sage, Indian Paint Brush . . . in fact, I have found Mariposa lilies in bloom at 10,500 feet.

R. B. LYTTLE, Barstow, California.

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