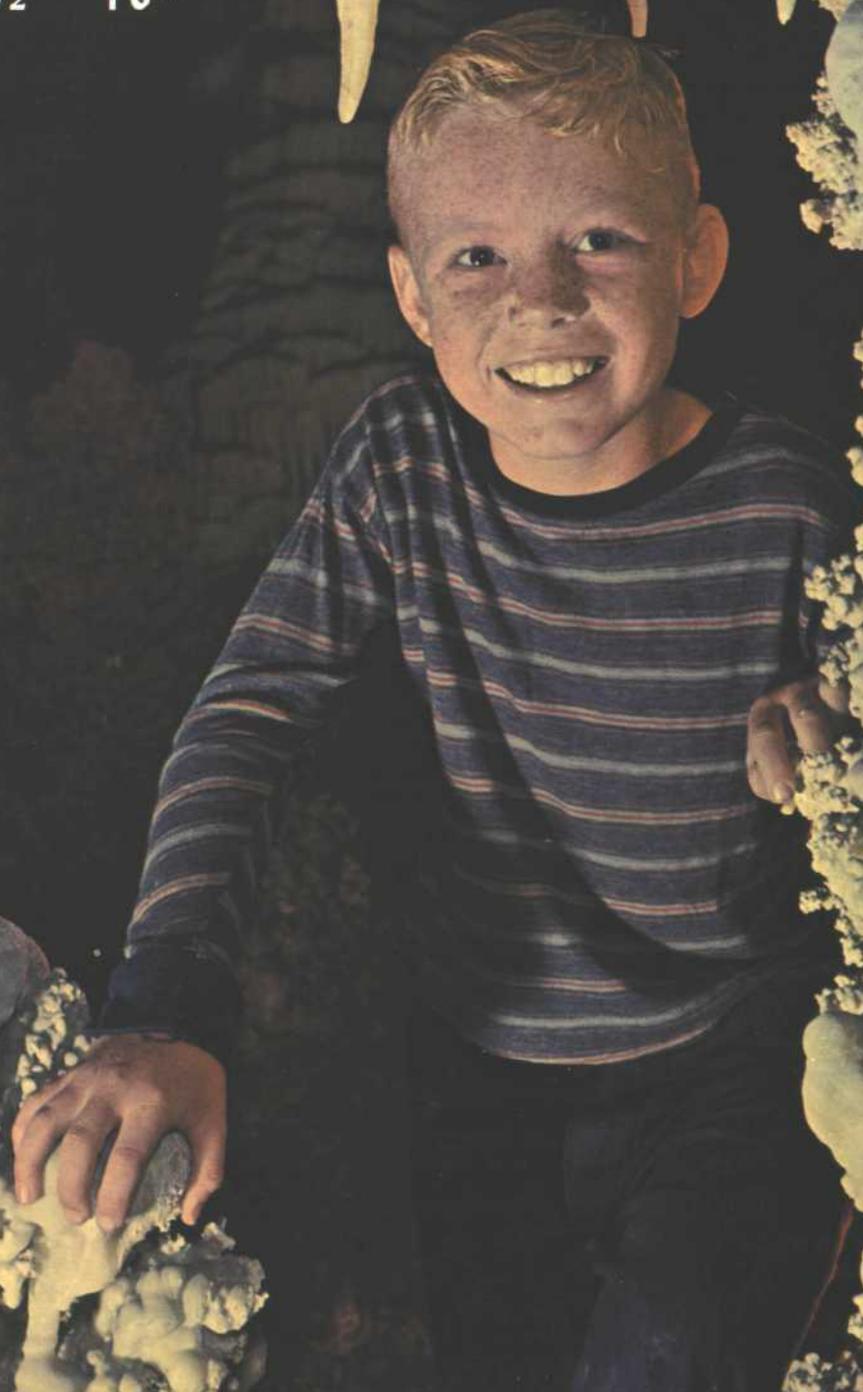


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Caving Enters Its 'Golden Era'

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Page 14

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AN OPPORTUNITY FOR YOU TO FURTHER THE STUDY OF ARID LANDS

The University of California at Riverside is embarking on an extensive research program on arid lands, and *DESERT* readers can contribute to this significant project. Scientists at Riverside are intensively studying the fauna, flora, geology, climatology, geography, soils, agricultural and economic features of arid lands. These studies also include man's adaptation to a desert environment by anthropologists and archeologists.

The establishment of the Philip L. Boyd Research Center in Deep Canyon near Palm Desert has provided "a living laboratory of desert plants and animals." Research is now underway on the desert big horn sheep; an old Indian trail; the behavior of frogs and toads when the desert streams dry up; and numerous other studies of plant and animal adaptations to desert conditions.

In addition, the world renowned Citrus Research Center and Agricultural Experiment Station (formerly Citrus Experiment Station) is conducting research on desert soils, agricultural use of arid lands and plants and animals suitable for agriculture in these areas.

If these and other research programs are to be supported properly, a large expansion of library resources is required. Items of interest are diaries of persons who have spent some time on the desert, reports of government and scientific agencies, accounts of early travelers and voyages to arid and other regions, archeological and anthropological studies of the civilizations and peoples, and the agricultural and economical development of arid lands.

The University of California Riverside Library has benefited from many valuable gifts in the past. *DESERT* readers who have material which falls within the classifications of the preceding paragraph may further the research programs by contributing materials to the library. Readers should contact: Edwin T. Coman, Jr., University Librarian, University of California, Riverside, California.

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CHARLES E. SHELTON
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desert detours

by Oren Arnold

As a private research I asked 100 desert dwellers to name 10 species of cacti (of which there are some 1500). Eighty-eight of them couldn't do it. And seventy-one listed yucca, century plant and ocotillo, which aren't cacti at all. Best informed was a 90-pound ex-school teacher from Milwaukee taking a TB rest cure. Unlike most, she had no television set; she was an eccentric, she read books.

Desert climate is perfect, thermometers to the contrary notwithstanding (you can't trust these fool inventions). "Even the blows are beneficial," Bob Tucker told me from his ranch house porch. "I never have to de-horn my cattle; just drive them through the windy Pass. Wind and dirt quickly sandpaper off their horns."

I cannot condone those silly, shallow persons who go nuts about rock hunting on the desert. I only go half nuts.

Nowhere else on earth is Night as impressive as when enjoyed from the top of a desert mountain. There, the earth turns velvet, the sky hovers close. Stars are almost intrusive with their brilliance, sparkling like bits of splintered glass. And the moon? A miracle—not for human colonization, but for human dreams!

Strangers have weird misconceptions about the climate on our desert. All they can envision is heat. It does warm up some, but the main manifestation is lack of moisture, an extreme dryness. Also it can get very cold indeed. Last January, 19 inches of ice formed all over Lake Mead. Dry ice, of course.

It happens that I live in the world's greatest oasis (and shame on you if you don't know its name) where private swimming pools are as common as bird baths, which they often serve as. "Here," says my banker neighbor Herb Leggett, "we desert rats have learned that pool water not only gives people (i.e. guests) ravenous appetites but stimulates their thirst—for everything except water. The poolside consumption is unbelievable. After serving as bartender, life-guard and moppper upper, you conclude that a swimming pool is a thing of beauty and a joy for others."

Seems that Red Baines, who lives in a cactus forest north of Tucson, was having a little domestic trouble. He walked into town and asked a lawyer if there was any way to avoid paying alimony. "Yes sir, two ways," the attorney answered him. "One—stay single. Two—stay married."

I get bored with people who keep saying the United States was founded on Plymouth Rock. Fact is, our Southwestern desert region had white towns, schools, taxes, churches, juvenile delinquency, all the glories of civilization at least 80 years before the Pilgrims sailed.

"I wouldn't mind putting away something for a rainy day," avows my desert-rat friend Ladd Hayworth, who lives Back of Beyond, "if only I could find a clear day in which to do it."

The USA now has 185 million people—a new citizen every 11 seconds. Unless we have devastating war or equal, by the year 2,062 America will be one solid city from coast to coast.

(That's no exaggeration.) I'm thankful I live in *this* century. My great grand-kids won't even have a desert to flee to.

Here's an advertisement I saw recently, seeking men to work in our desert regions: "Wanted—young, skinny, wiry fellows not over 18. Must be expert riders, willing to risk death daily. Orphans preferred. Wages \$25 a week." It was in a San Francisco paper dated 1860, trying to build up the Pony Express.

"Collector of Internal Revenue" is correct for a certain gent of importance in April. But an edge-of-the-desert citizen in Arizona, who operates a car washing business, has this sign out: "Collector of External Residue."

"I ain't heard much about Frank Sinatra since Kennedy went into office," avers Bedrock Tucker, up in Nevada. "This I figger is one of the solid accomplishments of Jack's administration."

Somebody in Buffalo, N.Y., mailed a letter addressed simply: "Scorpion-Selling Place, Arizona." That was good enough; it went directly to my good friend Dr. Herb Stahnke, Arizona State University's famous poisonous animals expert.

Along about now I have an impulse to hide my head under the desert sand. That's an ominous cloud boiling up over the horizon, a horrendous smoke cooked up by bureaucrats back in Washington half a century ago. It gets bigger and blacker every year. It wasn't meant to be like this. In fact, when it was first started a very astute but erroneous prophet said, "The income tax will never affect anybody except the very rich."

Him who has, gits. Uncle Sam, for instance.

What *can* we do about the outrageous national debt, about inflation, bureaucratic waste and confiscatory inflation? Old Man Give-A-Damn Jones, aging rockhound who is wiser than he looks, came up with this answer: "We can raise such high-hoppin'-hell with our Senators and Representatives that the noise will echo all over the nation. Pretty soon we'll have a parade of protests that'll force reform!"

Okay, let's start! I'm writing three powerful desert neighbors about it today—Goldwater, Hayden and Rhodes.

Spring on the desert? . . . Spring, with flowers? . . . As nowhere else in the world! A magnificence! A contrast. A fantasia of color and form. A Persian carpet of beauty and inspiration. Thank You, Lord.



NEW IDEAS for DESERT LIVING

By DAN LEE

NEW TRAIL BIKE FROM

JAPAN: You can't really call the Honda Trail 50 a power scooter in the strict sense of the word. Wheels and tires at 17-inch diameter are much bigger than average for a scooter. Yet, the machine is definitely aimed at the buyer who wants an off-trail climber. It has several interesting features. For example, the three-speed manual transmission can be locked in any gear. It has a complete electrical system, from turn-signal indicators to a tiny light that glows when the ignition key is turned on. Starting is by a kick-lever. Hydraulic shock-absorbers are mounted front and rear.

The 5-horsepower engine starts easily; fuel tank capacity is one gallon. The low-gear ratio is a fantastic 82- to 1! Top-speed with this low-gear ratio is about 25 mph. You can literally stand this bike on its tail, and it keeps right on climbing. The Honda Trail 50 has both front-wheel brake, operated off the handle bar, and a foot-pedal control for rear-wheel brake.

I tested the Honda in some of the toughest desert country around. My first impression was that it rides super-soft for a trail machine — yet when you give it the gas, it zips right up steep grades and over small rocks and bushes with ease. Low gear has all the power you'll ever need, believe me. Steering response is good. My only complaint here is that I could not turn the Honda sharply.

Only serious drawback to the Honda as a trail machine is, of course,



HONDA TRAIL 50

the overall size. It is quite a bit longer than other trail bikes—which may be a problem when packing the bike in sedan or station wagon—or when packing in over unridable places on the trail. All in all, though, the price tag of \$275 is amazing when you consider the extra equipment that is standard on the Honda Trail 50. Literature can be obtained from American Honda, Dept. 62-I, 4077 West Pico Blvd., Los Angeles 19, or from Honda of Arizona, Dept. 62-I, 1333 E. Camelback Road, Phoenix.

COMPACT, PORTABLE

HEATER: Rustling up driftwood for a fire gets harder every year. And without a fire, winter nights in the desert can be as cold as they are anywhere else. After looking over just about everything in the small portable-heater class, I ran across the Tilley. This handy little unit burns kerosene, and is actually a radiant-type heater. It is available in many sizes, of course,

but my favorite is the R-55. This size holds a full gallon of kerosene — enough to put out a solid 3000 Btu's of heat for 48 hours—about equal to two or three butane burners in a small trailer, all going at once. We tested this heater at home in large rooms, outdoors in a big tent, and in the garage on a cold night.

The big reflector throws off a startling amount of heat, and even though the mantle glows red-hot all the time, the reflector remains cool. Even the screen-guard stays cool! All the heat is thrown outward, and at a distance of six or seven feet the rays are concentrated.

The Tilley will heat a 16x18-foot room in 20 minutes, with no outside help. It will warm a big 9x9-foot tent in five minutes. And in anything smaller, like a camper or trailer, it'll positively drive you out!

This new heater burns clean with no smoke, no odor.

The Tilley sells for \$29.95 in a 2000 Btu model; \$39.95 (R-55) in the 3000 Btu model. While the Tilley is truly a remarkable heater, I disliked the clumsy starting proced-

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ure. An alcohol-soaked wick is used to pre-heat the mantle for about five minutes. For an extra six bucks you can have an instant-lighting attachment, and I recommend it.

The Tilly heater converts to a kerosene floodlight by simply removing one head and replacing it with another. This lamp-head attachment sells at \$7.95, and throws off a light strong enough to flood an entire campground, though not as brilliant as the white-gas variety. Tilly heaters have been sold in England for a hundred years, but in the U.S. they are still fairly new. The sole West Coast distributor is K. W. Klessig, 8766-D East Valley Blvd., Rosemead, Calif.

SANITARY CAMPSITES: As any camper knows, when a group of people get together in the open spaces for a week's stay in the desert, toilet facilities pose a problem. It isn't always possible to build a permanent type installation. The Mackenzie Company sent over a folding, tough cardboard toilet frame that can be used with a plastic liner and chemical disinfectant. The unit sells for a low \$3.95. It is sturdy, well-built, and offers a better solution than long walks into the brush. It not only provides the comforts of home, it eliminates odors and the danger of pollution to the campsite. It weighs under 4-pounds, has a tight-fitting lid, and inexpensive refill kits of sanitary plastic liners and deodorants allow re-use of the Disposamode. From: E. W. Mackenzie Co., P. O. Box 24-D, Fairmont Station, El Cerrito, Calif.

HOUSE ON WHEELS: Campers for light trucks continue to be popular for desert travel. Most everyone is familiar with the camper unit that bolts onto the bed of a pick-up truck. The new breed is called a "housecar," the truck chassis is purchased bare, with no bed. Foundation rails are then welded onto the chassis and the camper is built right onto the new frame, making it an integral part of the truck. The advantages usually set forth include a lower overall silhouette for the camper. There is more floor space, because



ROLL-A-LONG HOUSECAR — BOLTED DIRECTLY TO FRAME AFTER TRUCK-BED IS REMOVED



TILLY KEROSENE HEATER

the truck bed does not interfere with design. The camper body, bolted down securely everywhere, provides a more rigid fixture for travel over rough roads on lengthy expeditions.

One of the newest models to hit the market is the Roll-A-Long Sportster. This unit features complete accommodations for five persons, including a dinette, toilet and shower, water system, butane stove, light, and oven, refrigerator, and other extras. Housecars make excellent campers. The drawback, of course, is that with the unit bolted down permanently, the truck is useless for any other duty. A housecar provides maximum comfort for specialized duty. The price is \$2895, from Roll-A-Long, 1242-D N. Tyler, El Monte, Calif.

GOLFING GIMMICK: More golf is played in the Southwest at this time of year than anywhere else in the U.S. A brand new item to aid the golfer improve his game has just hit my desk, and I'm thoroughly intrigued. For \$1.25 the buyer gets a package of three

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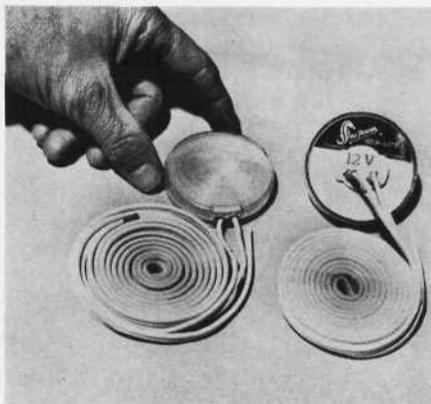
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SEALED - BEAM 12 - VOLT LIGHTS:

For campers, trailers, or desert cabins without commercial electricity, the 12-volt light can be a boon. One of the best 12-volt light sources I've ever found is the Sea-Lite. Only three inches across and a half-inch thick, the Sea-Lite is actually a sealed-beam unit! Further, the light is guaranteed for up to 1700 hours before replacement is necessary, due to the long life of the sealed-beam element. Flush - mount or hidden - mount models are available in six - volt, or 110 - volt. I've used the Sea-Lite both in my trailer and in my boat and found it excellent. It gives more light than you would expect from such a compact unit. Considering their long life expectancy, the price of \$2.30 each seems reasonable. From: Sea-Lite, Sweinhart Equipment Sales, Inc., 2900-D Olympic Blvd., Los Angeles 23. ///



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THE SHRINES OF KINO

By CHARLES W. POLZER, S. J.

THE MORNING we left Phoenix was crisp and sunny; beneath a light cloud cover we sped south to our Sonora destination. The two trucks of our caravan were loaded with a week's supply of food and water that would enable us to tour the missions of the Sonora River. Since 1961 commemorated the 250th anniversary of Padre Kino's death in Magdalena, Sonora, our group from the Jesuit high school in Phoenix felt a particular enthusiasm for what might seem a gruelling introduction to a vacation. What we found was a world of fascination—simple security, unparalleled hospitality, and intriguing history.

The quasi-expedition comprised three Jesuits: Rev. Edwin McDermott, S.J., principal of Brophy College Prep and mission authority; Gustavo Fernandez, S.J., acting interpreter; and myself, trail boss, cook, and photographer. With us were four of our students chosen for their resourcefulness and maturity; previous trips

had taught that the remote terrain of Sonora is no place to tame childish temperaments. As it turned out, our selection paid off.

Tumacacori National Monument was our first official stop. We looked up Michael Becker, the personable superintendent, who gave the boys a few pointers on mission architecture and explained the workings of San Cayetano. Without this visible introduction it would have been more difficult to spot antiquities through the ruins or restorations along the mission chain to the south.

The normally unpredictable crossing into Mexican territory is a familiar procedure to many Southwesterners. Once equipped with our tourist permits we pulled up at the check station just out of Nogales and began the puzzling procedure of registering our trucks with the authorities. Our Travelall occasioned a dispute as to whether it was a station wagon or a truck; the chromium series number B-100 on the hood decided the



RUINS OF CHURCH AT COCOSPERSA. RESTORATION ATTEMPTS FAILED, AND LOCAL PEOPLE ERECTED SMALL CHAPEL AT RIGHT.

ABOUT THE AUTHOR: Charles W. Polzer, a native of San Diego, entered the Society of Jesus in 1952. At present he is studying at Alma College, Los Gatos, Calif., the theologate for the California Province of the Society. He spent 1958 to 1961 in Phoenix, where he became interested in the history of the Jesuit missions in the Southwest. Fr. Polzer worked in conjunction with the Padre Kino memorials for about two years: "I hope this article will be of some interest to your readers," he wrote. "If they don't stone me and I get out from under my present landslide of studies, I'll try to whack out a little article on Jesuit treasure."



RAY TANNER DISCOVERS THE SANTOS IN THE SHADY CORNER OF THE HUEPAC CHOIR LOFT

issue as a truck! After we explained our itinerary and showed them some of our recently published articles on their locale, they displayed a new interest in our adventure. Graciously they ordered our papers and we were off to greet the other *Alto-Immigratio* signs with a confident "*Buenos dias, senior.*"

Turning northeast we left Sonora's Highway 15 near Imuris and geared down for the dusty climb up the Sierra de Pinitos to the tiny Cocospera Valley. In the afternoon sun the mounded ruins of Nuestra Senora del Pilar y Santiago de Cocospera emerged before the anxious eyes of our "explorers." This once magnificent structure is rapidly deteriorating into the soils of time. To this very spot over 250 years before, bands of Indians from the Colorado and Gila rivers rode to join Padre Kino in dedicating his new church.

For years this mission-compound was an outpost on the Apache frontier, and consequently was burned and razed numerous times. Today the mud-brick and plaster facade sags precariously toward the litter-strewn ground. Inside the eroded walls two fired-brick arches still encase the sanctuary tinged with the bright pigment of Indian painters. Cocospera once withstood Apache marauders and empire builders, but now its ruins are only a monument to the unstudied destruction of the shovel wielded by men who believe in a myth of gold.

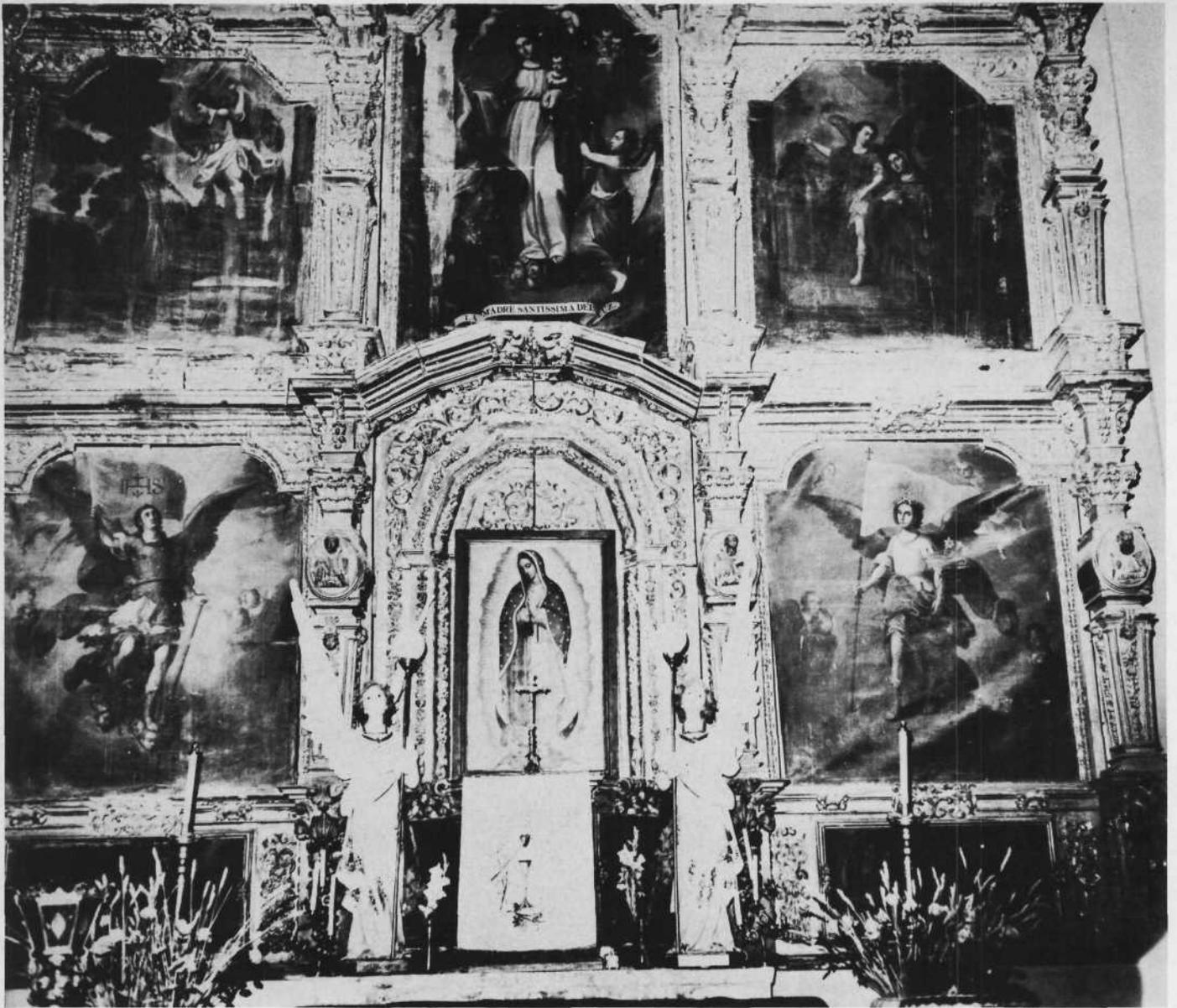
Evening approached as we left the mission of "onion mountain." Our planned stop was Cananea where Messrs. Donohue and Velasco of the Cananea Copper Company recommended we camp at the Ojo de Agua, the crystal clear source of the Sonora River. Accepting their kind offer, we discovered that the Ojo was also

the city's Country Club! Our first night was not too rough since we had barbecue pits, running water and a swimming pool—not to mention the huge kettle of homemade tamales added to our provisions.

Refreshed by the cold mountain air, we departed early for the day's drive down the valley. We twisted across the *barrancas* until we saw the little church of San Miguel de Bacoachi thrust its tower above the river bluffs. While we Jesuits made the customary inquiries about the church, the boys cautiously threaded their way into the belltower and found the bronze-cast vestiges of Jesuit mission history, dating back to 1689 and 1727. A wizened *matrona* explained that when the bells were first hung on the mission facade each in a niche above the other, the happy Indians tugged on the rope, and the facade collapsed from the strain!

Having lost some 2000 feet elevation, our route now lay along the river itself. The trucks crossed the foot-deep water so many countless times that the brakes were soaked beyond use. The unbroken pattern of cattle, burros, horses, plots of corn, wheat, and beans continued through the verdant valley until we reached Chinapa. Although Senor San Jose de Chinapa boasted a 313 year history, the church itself was quite small, obviously not the original structure. By now the boys had voluntarily undertaken the precarious job of recording the bell inscriptions. But Chinapa offered no access to the high-hung bells. So using a mixture of English, Latin, perplexed looks, and pesos, they persuaded a gray-clad peon to resurrect a log ladder, missing a few rungs which he promptly replaced.

Erroneously we speculated that many of these bells



LOWER PORTION OF THE PAINTINGS IN THE GOSPEL CHAPEL OF ARISPE

had been transported from the mission chains to the north and west where many bells are missing or missions are in ruin. We noticed that seldom did the bells register a saint's name corresponding to that of the mission; in fact the patron of the bell had a mission somewhere else along the frontier. But we now know that no correlation need exist between the patron of the bell and the patron of the church. Quixotically though, we inquired in Chinapa if the bells of Senor San Jose had come from another church. The little throng answered volubly that these were *their* bells. Then it dawned on us that they feared we would take their bells and leave the village destitute of a most prized possession.

We crunched through more river bottom until the town of Arispe sprawled before us. By Sonoran standards this is a near metropolis. Since its historical birth in 1646 when Padre de la Canal opened a *visita* here, Arispe has played an important role in the development of northern Sonora. Its huge stone church was erected by Padres, Roja and Mora of the Society of Jesus, and only 14 years after the Society's expulsion in 1767 the church became the cathedral of Antonio de los Reyes, first Bishop of Sonora.

Centered in a rich mining area, the church's high altar was once adorned with solid silver. Even today traces of the cathedral's elegance are evidenced in large gilded paintings of Our Lady's Assumption and of the saints of the Society. Midway in the nave rests a Spanish-style crucifix reputed to be that of Padre Francisco Saeta, the first martyr of the Pimeria Alta, as Sonora and Arizona were known in earlier days.

Arispe showed signs of real civilization with electric lines and ice cream merchants. As trail boss I thought the roads would improve as we drove down the sun-drenched hill—otherwise how could this town have so much and remain so isolated? I still can't answer that question because the roads got worse, not better, and things seemed infinitely far away.

Acting against the advice of my lawyer friend, Paul Roca, an experienced Sonora traveler, we jolted down to the river and left the *camino para montes* to crawl through narrow cuts and cling to rocky buttes. Just above Arispe the Rio Bacanuche joins the Sonora, so our reentry into the river was wetter than before. Even when we overshot the actual roadbed we managed to find it later downstream.

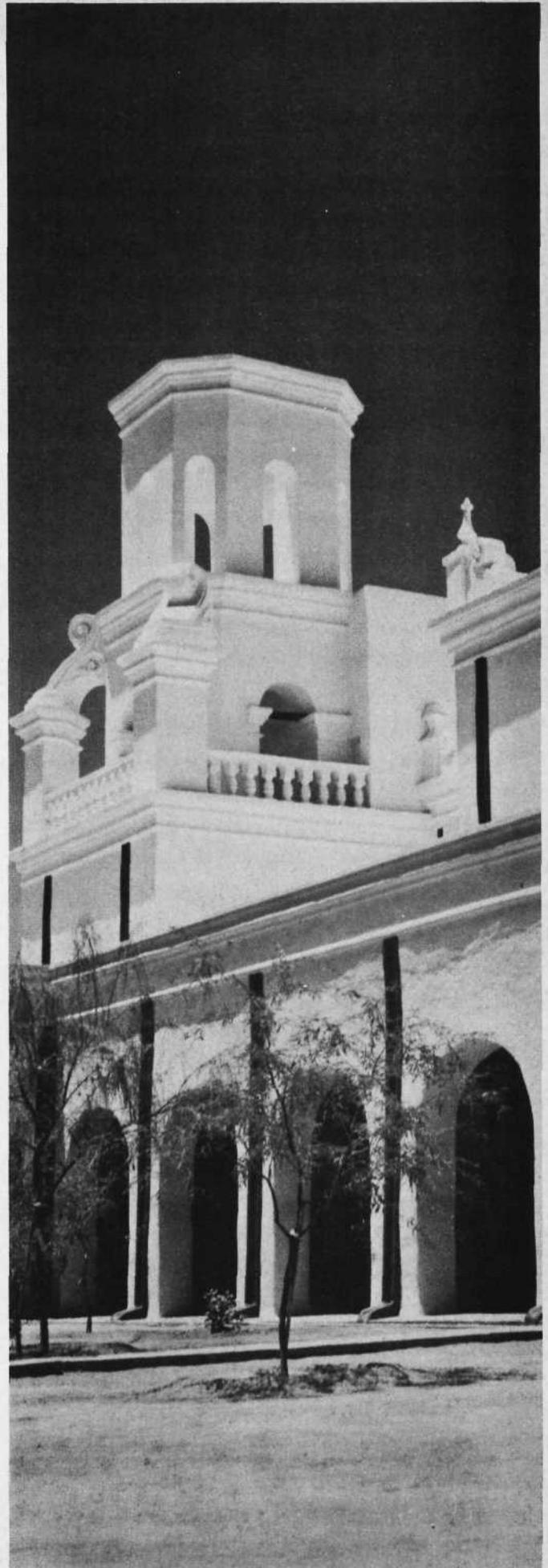
CLOISTER OF SAN XAVIER DEL BAC, TUCSON

It was a wild afternoon, with our teenage drivers itching for a little river-bottom drag-race. The road worsened; we yearned for the slow but dependable mountain road. Adhering to the tested method of stopping to talk with every *vaquero* who clopped by, we were progressively more discouraged. Finally, 20 kilometers below Arispe, a *vaquero* told us that the river was impassable. So we slithered across the sand to a couple of adobes where we begged permission to cross a farmer's field onto the mountain road that happened to drop near the river at his bean patch.

We were happy with our choice for only a quarter-hour. Utterly distraught with the tedium of that chewed-up goat-path (we had made far better time in the river), we turned back to the inviting sand. One mile more was trail's end; the jeep churned on ahead while our truck dozed into the hot sandy ruts. Luckily, freeing ourselves was only a 20 minute job under the jovial surveillance of a *vaquero* who characteristically rode out of nowhere. Had we been stranded without the powerful assist of four-wheel drive, I'm sure our *vaquero* would have rescued us with a team of burros—*manana* perhaps, but rescue nonetheless.

The sinking sun now bathed the bright soils with deeper shades. We scampered on to Sinoquipe via the mountain road which had now leveled out on a plateau. The trucks detoured into Sinoquipe just as the Mexican housewives were stoking up the fires for supper. In a few minutes some town's folk learned that we were Jesuits there to visit the mission. And all that remains of Padre Castanos' church is its graceful tower, whose five bells tolled commandingly as we prepared to take pictures and make preliminary checks.

Within minutes our band was surrounded with some



200 villagers who had come to say hello! Like boys anywhere the *chamacos* showed our teenagers how to negotiate the tricky passage to the belfry landings. The castings they saw there dated back to 1687 and 1734—enough of a reward for a hard climb. While I surveyed the Travelall for the evening menu, Mr. Fernandez was conducting a small catchism class in the only standing remnant of the mission building.

We left the smiling population of Sinoquipe after dozens of introductions to members of its aristocracy, which included two who proudly knew a score of English words. With the fall of night impending, where were we to camp? The abundant waters of the Sonora filter beneath the sands north of Sinoquipe and frequently do not well up along the further course of the river. Eventually the out-buildings of Banamichi loomed in our headlights; by eight o'clock we threaded the narrow *avenidas* lined with silent faces. Having bought some gasoline, we embarked on what seemed a hopeless quest for rest. Once beyond the village complex and past the perimeter of tequilla-fed parties, we found some open ground and stopped. It was our hardest night, but no one complained of cold food, mounds of ants, or browsing cattle.

Morning dawned wonderful no matter how poor had been the night. We broke camp and backtracked to the little town of Huepac. The mission we witnessed was unimpressive from the exterior, but inside the ornate ceiling of carved mesquite beams left a distinct impression on us. Cast off in a choir-loft corner were several dust encrusted *santos*, all carved wood from an early time. Rarely did we see many such *santos* reck-

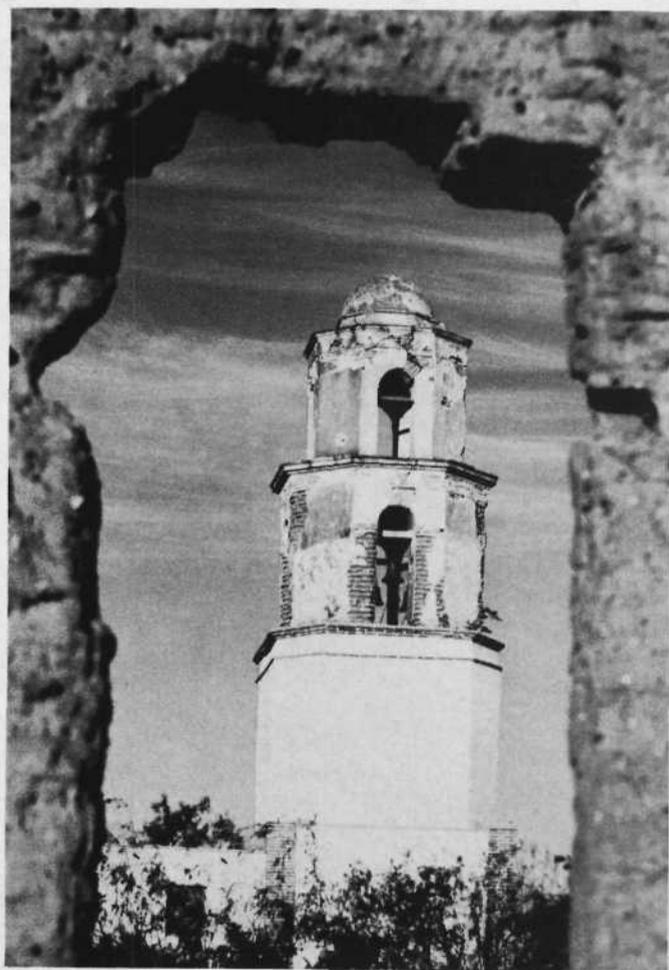
lessly forgotten. Here the boys discovered a shiny bronze bell reputed to be 500 years old, imported from an old Spanish church.

It was nearly nine o'clock when the Travelall turned past the field headquarters of the Mexican Nuclear Energy Commission in Aconchi. We halted beside the strange edifice of San Pedro de Aconchi. But even stranger inside, we gazed on the black corpus attached to the cross over the main altar. The contrast was so striking against the lime-white walls that our younger companions referred to this as "the Church of the Black Christ."

Village legend claims that the crucifix was salvaged from the mission after it was razed by Apaches; the black color is just an effect of the fire. But close examination shows this crucifix has been finished in black and clothed in a white skirt. Whatever the true tale, the Black Christ of Aconchi highlighted the anomalies of our adventure.

Dryness and heat became noticeable for the first time as we followed the falling river's course. Baviacora greeted us next through the shimmering heat waves. While Fr. McDermott prepared to celebrate Mass, the mission bell summoned the free Mexicans, who filed into the narrow nave. There is something inexplicable

LEFT: SAN PEDRO DE ACONCHI, WITH ITS AUSTERE FACADE.
CENTER: THROUGH THE WEATHERED ARCHWAY OF AN ANCIENT ADOBE WALL, THE LONELY TOWER OF SINOQUIPE GUARDS THE SONORA RIVER.
RIGHT: THE STONE CHURCH OF LA ASCUNCION DE ARISPE WAS BUILT AT THE TURN OF THE 18TH CENTURY.



in realizing that Mass is again to be celebrated where three centuries before the Indians first heard the *In-troibo ad altare Dei* spoken by a member of the same religious order.

Having hunted up some scrawny limes (the best thirst quencher) in a plaza refreshment stand, we rumbled out of Baviacora. We watched the river slant westward as we climbed into the mountains. Once we pulled aside to observe a ring of horses trot around a high heap of grain. Below the Indians chanted an unfamiliar melody to keep time with the horses' hoofs; apparently they were thrashing the grain the same way their ancestors had been taught by the agriculturally minded Blackrobes.

Finally, our two trucks rolled into Masochahui, junction for Cumpas and the cities of Sonora's northeastern sierra. Here we would have turned, but the three days of travel over the rough terrain and sharp-stone roads had worn down the caravan tires so rapidly that we short circuited our itinerary for Hermosillo and eventually the Altar valley. Reluctantly we took the fork for Ures and climbed up the mountain pass until the Sonora was lost in its western curve.

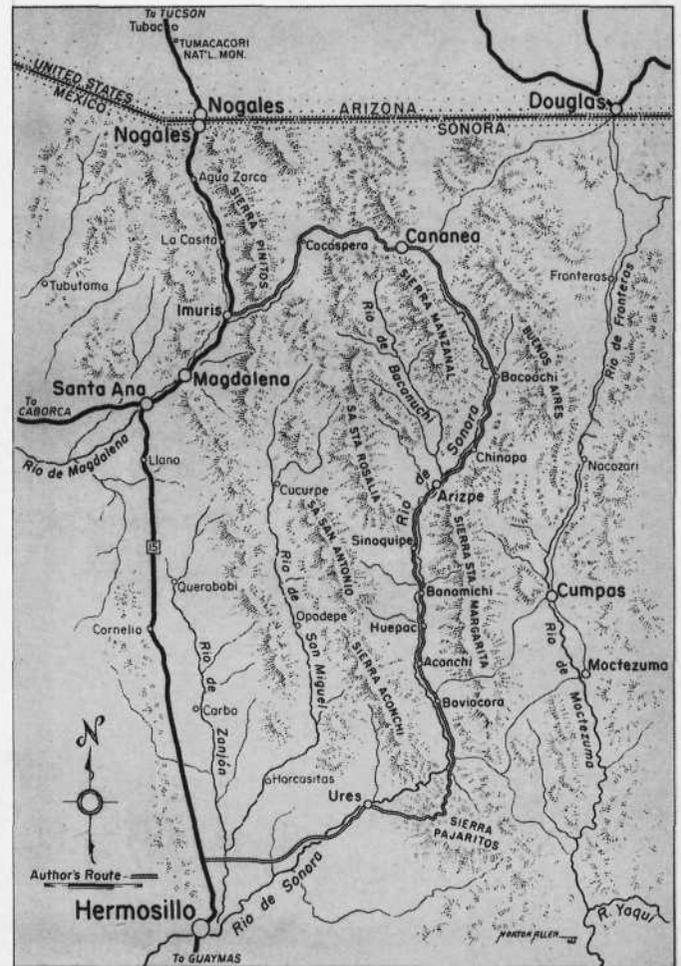
Although the pass topped out at 4000 feet, the vista seemed like 10,000. Everywhere drouth had scorched leaves from trees and the brush had suffered the brittle death of thirst. Mountain springs left chalky traces of mordant moisture; the few hovels that clung on rocky promontories were closed or abandoned. Relief came with the long grade back to the valley floor—a welcome change from the harrow hairpins of the Parajitos.

The pin-sized glint of light we saw in the broad river

delta marked Ures, our next stop. *San Miguel de los Ures*, the twin towered church on the plaza, is of more recent construction; its bells date only to 1852. But this bustling back-country metropolis points to a mission origin of 1636. Since we feared more trouble with river sand if we turned north into the San Miguel Valley, we pressed on to Hermosillo over the wide and relatively level highway. It was a joy to hear the tires hum on the pavement of Highway 15 after three days of dirt and rock.

The first half of our Mexican adventure came to a surprising close. Tired, dusty, and hobolike, we wandered into the lobby of the plush Hotel San Alberto in downtown Hermosillo. Our request to see the manager, Roberto Hoeffler, was cautiously granted. Even in our grimy attire he recognized us and his keen sense of hospitality accurately assayed the weariness of his guests, old and young. Immediately we were conducted to a suite for showers, then a swim, and a dinner of *biftec Tampicano* matchless for its quality. I had a hard time explaining to the boys that we didn't have to rough it every night!

We had visited only a dozen of the 120 missions in Sonora. And no one who visits even a handful can come away without realizing he has witnessed history. For today the towers of the churches still dominate the landscape as they did in the distant past. These churches are still symbols of the Indians' simple faith and central pride. The wonder will always be how those few missionaries accomplished so much with so little. Indeed, since they have gone, it seems that time has stopped, awaiting their return; little has changed in this land where so much more can be done. ///





A CAVE IN THE CATALINA MOUNTAINS NEAR TUCSON

Caving Enters Its Golden Era

By
Johns Harrington

OUR MEXICAN helper uttered a horrified spine-chilling yell from the depths of the cave tunnel. My father and I stood petrified, trying to decide in a few agonized seconds whether to race down the juniper-studded desert hillside and escape, or to do battle with the "thing" in the tunnel that had frightened the laborer.

Just then, like a runaway locomotive in reverse, Pedro came scrambling out of the tunnel on all fours. When he reached the larger room near the entrance where we stood, he straightened up and dashed down the hillside. I had been ready to sprint, too, but the silence in the cave was tomblike.

Then Pedro, from the security of a large-sized yucca, peered around its spiked leaves and began swearing in Spanish.

In many years of archeological expeditions, during which I had often invaded the world of mystery and eternal darkness which lies beyond the mouths of caves, nothing had ever happened quite like this. My father looked at me. I looked at Willis Evans, the Indian foreman who accompanied us on "digs" throughout the Southwest.

Willis looked solemn, but then grinned slowly. Here was the answer. If Willis smiled like that, the "thing" in the cave was no slithering monster. The tunnel in which Pedro was horrified had been dug by Willis, who had moved every inch of earth with a small trowel in his search for prehistoric remains.

Curious and a little apprehensive, my father crawled in the tunnel. Moments later, he reappeared and motioned me to enter. What I saw explained Pedro's horror.

It seems that Willis had followed a large crevice filled with dirt as he dug into the side of the cave. Abruptly, it opened into a tiny room, six feet long and possibly four feet wide. There, staring at intruders of his death chamber, was an open-mouthed wild boar—quite dead and quite mummified.

What the poor Mexican said to Willis when he was finally persuaded to return to the cave is not for this record.

Meeting a mummified boar is hardly part of the average day's work of the modern cave explorer, but sleuths of the eternal darkness inside the earth are today in their Golden Era, and real adventure is very much a part of it. Thanks to modern equipment and methods, and pooling of knowledge, the followers of Huck Finn and Tom Sawyer are each weekend and holiday finding new dark worlds to conquer. Naturally, this new fraternity includes a growing number of motorists and other vacationers. The clan can be roughly divided as follows:

SPELUNKERS, or pure adventurers, who investigate caves for the thrill of descending a pit or

entering a tunnel in search of the unknown; and

SPELEOLOGISTS, who also love the quest into the subterranean world for adventure's sake but who study geology and plant and animal life underground on a scientific basis.

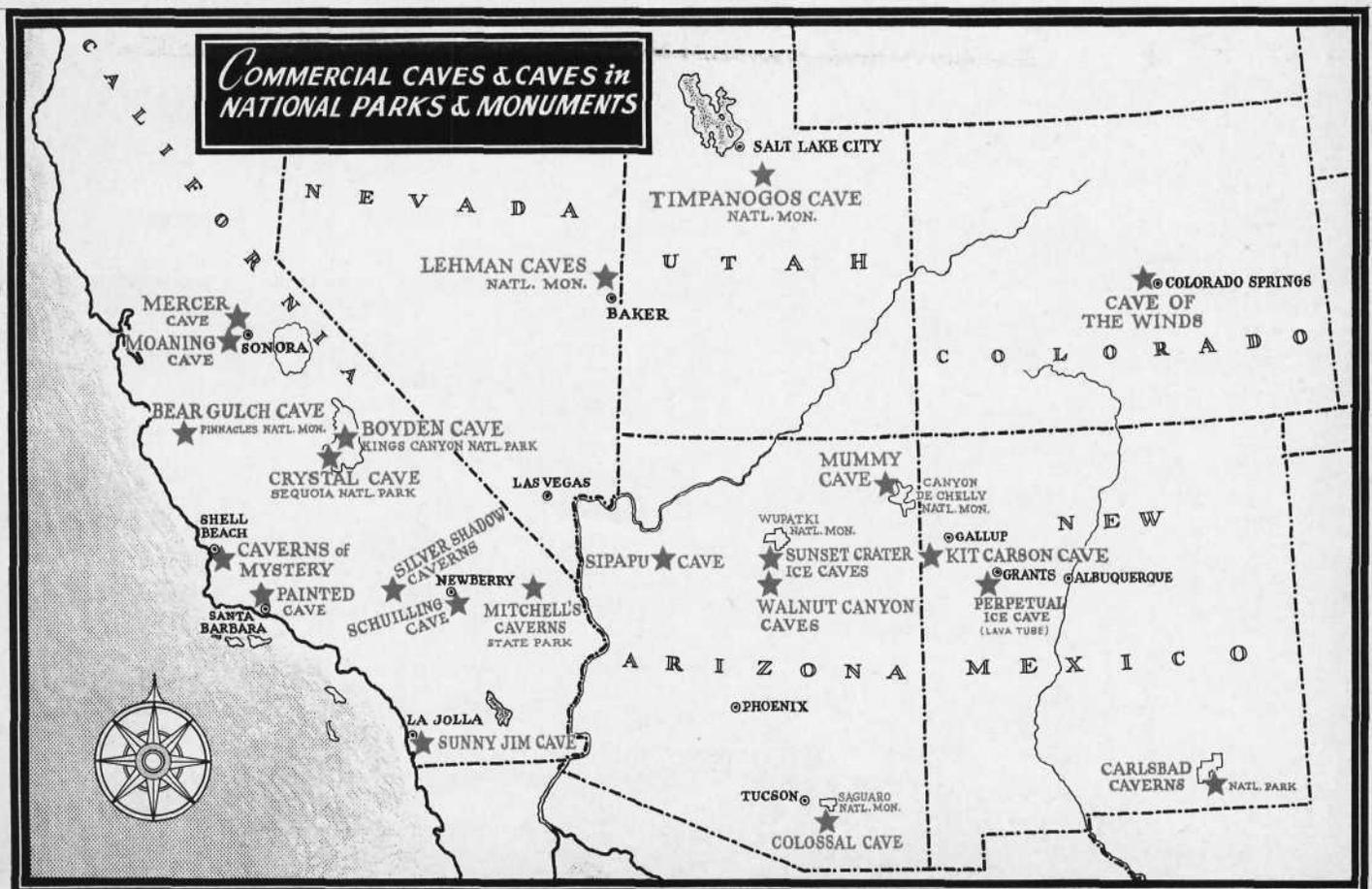
In addition, of course, are archeologists like my father, Dr. M. R. Harrington of the Southwest Museum, who spent a lifetime on the underground trail of ancient men. To this kind of cave hunter, caverns and rock shelters which are dry prove to be of primary interest because it is here specimens are best preserved.

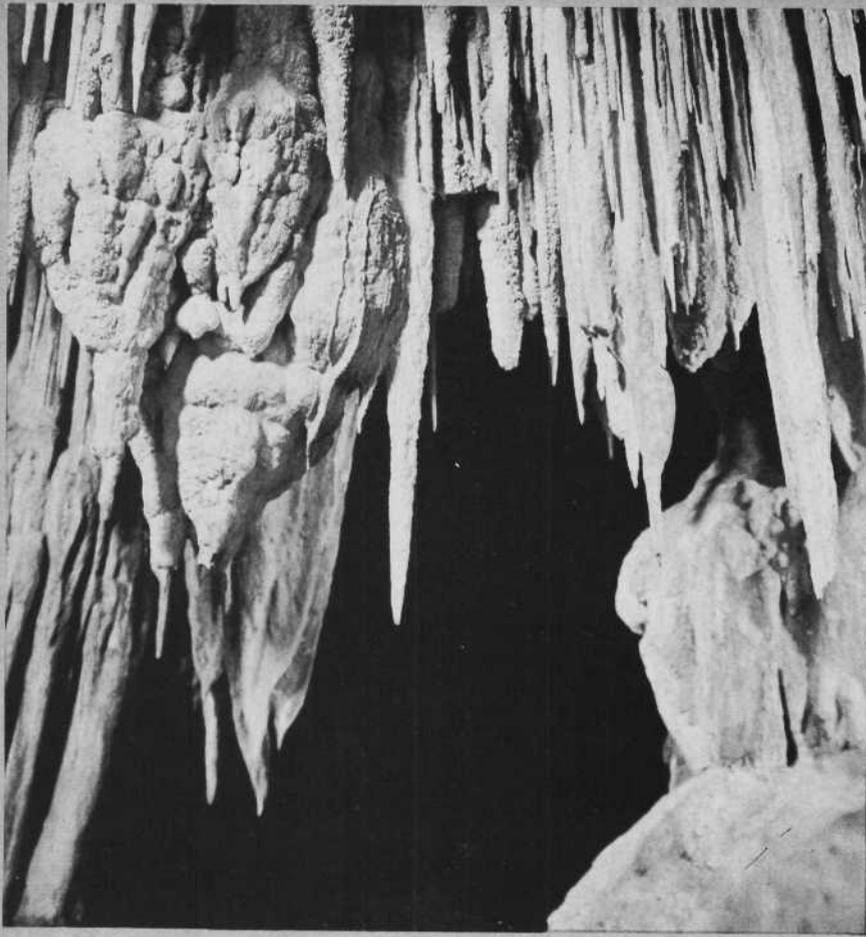
Incredibly, there are now approximately 2000 red-corpusclad men and women of all three "brands" in a unique organization with a two-bit name—the National Speleological Society, established in 1939 with headquarters in Washington, D.C. These adventurers seeking new underworlds to conquer are scattered in chapters (known as "grottos") throughout the U.S.

For the sake of science and to comply with the Federal Antiquities Act, which protects prehistoric Indi-

an remains, the job of digging up ancient treasures is left to the archeologists who are granted permits from the government. But, each group of cavers helps the other. Spelunkers, for example, locate caverns that may contain prehistoric finds and report them to museums. Also, they help map, photograph, and protect other types of subterranean areas. Caverns which contain stalactites and stalagmites seldom yield signs of ancient man; and yet they possess geologic and other wonders that can also be destroyed or damaged by vandals, unless safeguarded. To help protect this underground beauty, cavers must obtain a permit from the superintendent if they wish to investigate caves in national parks or monuments.

Speleologists get much help in locating new underground paradises from bone-digging scientists as well as from spelunkers. All members of the national society, no matter what their special interests, contribute to central files which comprise a precious source of information. This business of cavern sleuthing has been made all the more remarkable by the introduction of modern inventions





UPPER: STALACTITES IN MITCHELL'S CAVERNS STATE PARK, CALIFORNIA

LOWER: ARCHEOLOGISTS AT WORK UNDERGROUND IN GYPSUM CAVE, NEVADA

ranging from light steel ladders to Army field telephones.

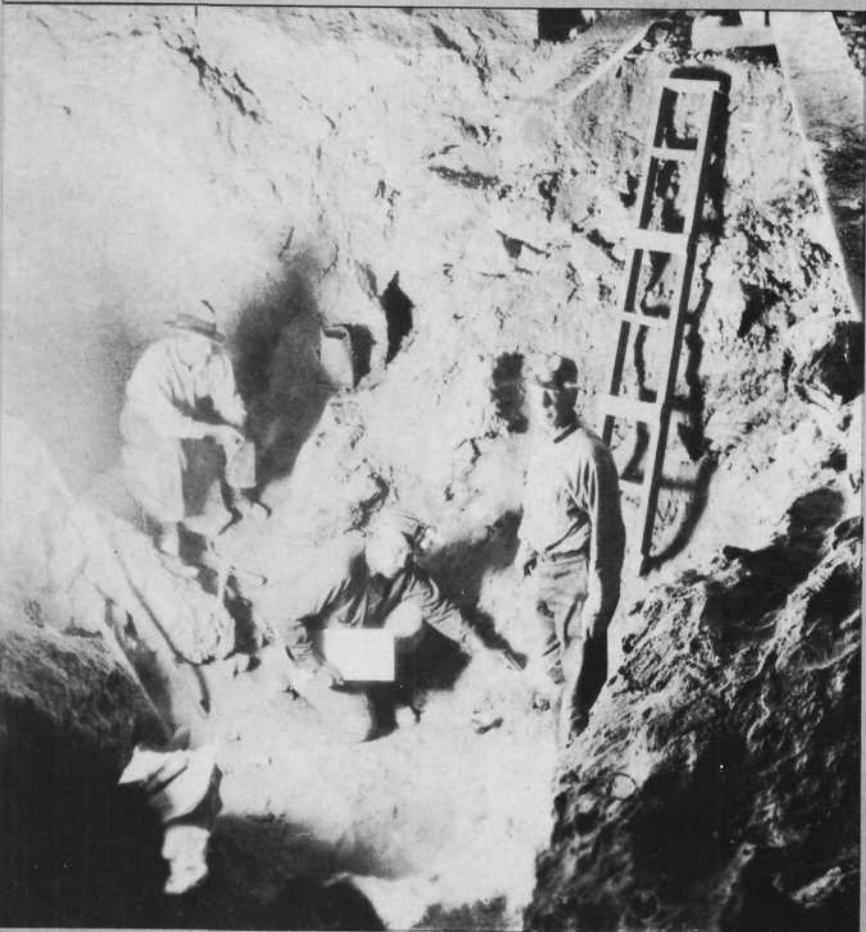
Just as fishing, hunting, and even hiking can be dangerous as well as unpleasant if enthusiasts do not follow the rules, experienced "cave men" have valuable words of advice for beginners:

1. *Never go "caving" alone.*
2. *Always leave information about your trip with local ranchers or other citizens in case a rescue party is needed.*
3. *Wear coveralls, cotton gloves, and tennis shoes.*
4. *Watch out for rattlesnakes, especially in cave entrances.*
5. *Carry several sources of light, in case one fails. The old standby is a miner's carbide head lamp because it leaves the hands free for climbing or carrying equipment.*
6. *Smoke arrows on the cave walls which always point to the entrance from which you came.*
7. *Stay away from wooden ladders which you may find in a cave. Too often these have rotted, or were insecure in the first place.*

"Never attempt a cave exploration that cannot be done easily and safely," emphasizes Dr. William Halliday, a leader in the National Speleological Society. "Also practice rope work and rock climbing in advance if you expect to investigate a difficult underground area."

One compensation of cave-hunting is the fact that only a fraction of the caves in the U.S. have thus far been inspected. Dr. Halliday points out that there are virtually thousands of caverns in the Southwest alone which have not even been touched.

Dry caves (those most likely to appeal to the archeologist) are rare in the East. They begin to be more frequent in the limestone areas of Kentucky, and become abundant in the Ozark country of Arkansas and Missouri; they are most plentiful in Texas, New Mexico, Arizona, Colorado, and Nevada. While limestone provides the most and best caves, underground rooms and passages can also be found in sandstone and lava. These latter caverns, however, are usually less interesting to the spelunker and speleologist because they are less colorful.



"Limestone caves are favorites of 'cave people' who go underground primarily for adventure," stresses Lillian I. Casler, a veteran "cave lady" from Altadena, Calif., "because caves of this type usually are larger, and contain stalactites, stalagmites, flowstone, rimstone, and other interesting formations.

"On the other hand, lava tubes, formed when lava cools on the outside and leaves a hollow shell, contain no formations whatsoever, although the tubes may be miles long and rough going."

In their search for sport and for increased knowledge, modern "cave men" have remarkable and spine-frosting experiences. My father will never forget being temporarily trapped in a cave with a tattooed mummy. And I'll always remember being lowered on a rope into what was reputed to be a rattlesnake den, but turned out to be a hiding place for the bodies of murdered pioneers.

All self-respecting cavers will want to admire the beauty of Carlsbad Caverns, but who ever heard of exploring by elevator? A little more primitive is Lehman Caves National Monument in northeastern Nevada. And there are many more which are unnamed.

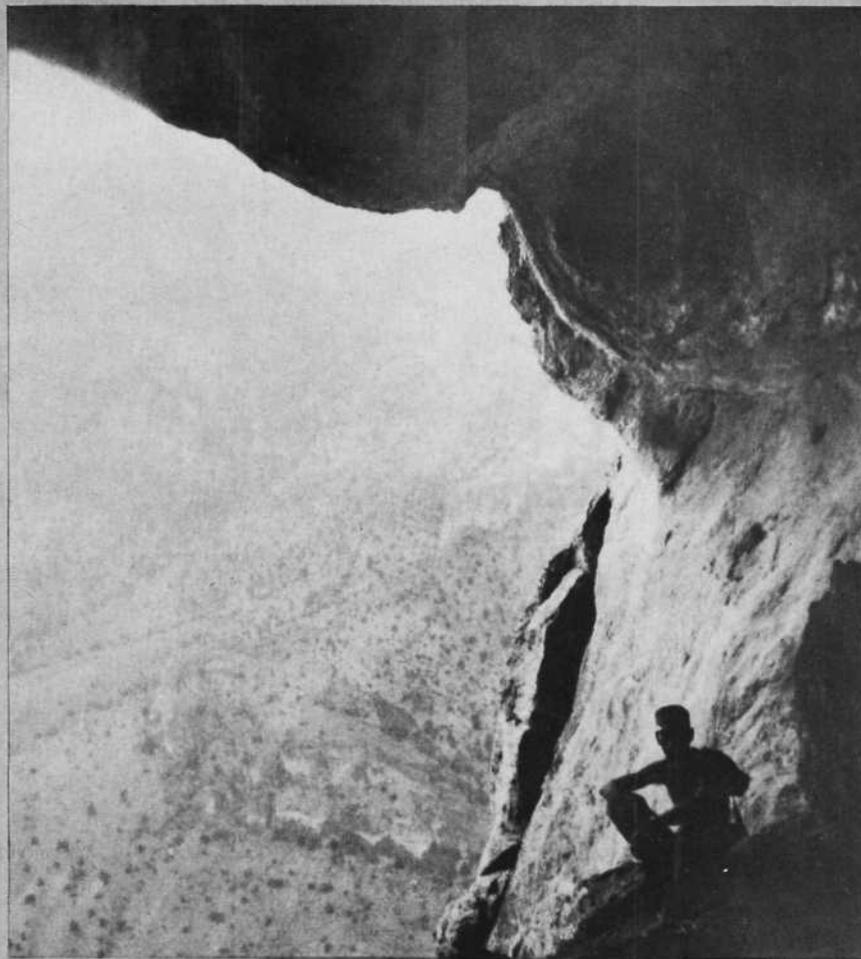
Some would-be cave navigators register mixed feelings. I'll always recall stumbling upon a little dome-shaped chamber 1000 feet up a canyon wall in a lonely and forsaken corner of Nevada, only to find this note under a rock:

*Date March 1924 . . . to eneybody:
I think there must be a lot of gold
some where around her but I dont
want it. I have runed a good pair
of shoes now dont know how I will
get down of here.
With love,*

*Axel Swensen
Am. Fork Utah*

Any veteran caver will agree that this strenuous occupation has its bleak moments. But they'll also hasten to add that Mr. Swensen or any other dauntless cave detective will soon be on the trail again despite temporary disillusionment. That craving for the mystery and the beauty below ground is just about incurable. For some time there will be new "underworlds" to conquer.

///



An explanation . . . and an invitation:

Johns H. Harrington
7615 McGroarty St.
Tujunga, Calif.

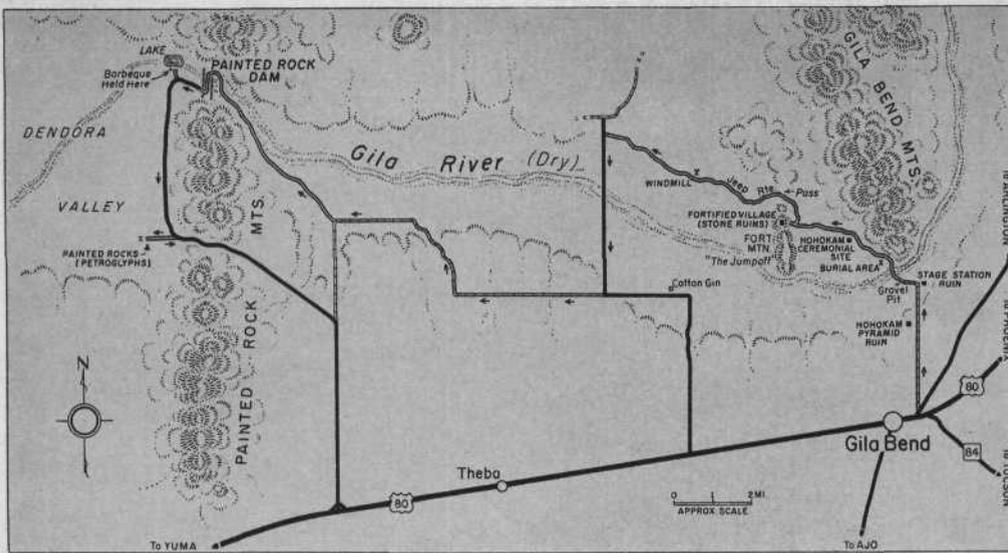
Dear Johns,

I will be glad to give you a list of all the commercial caves I know of open to the public and their locations, but publishing locations of undeveloped and unprotected caves runs counter to National Speleological Society policy.

There are two reason for this—first, most of our Western caves are deep, nearly vertical and therefore highly dangerous to inexperienced persons, who could easily find themselves sliding down a steep mud slope that ends in a vertical cliff of 30 feet or so, for example. Most of these caves are not negotiable at all without climbing ropes and ladders. Second, the vandalism in caves that have become known to the general public has reached staggering proportions in the last few years. Entire rooms in some of our most beautiful caves have been completely stripped of all formations within a few weeks when mineral collectors heard of the good specimens to be found there. Protective gates have been broken open on several local caves and irreparable damage done to the caves themselves. We have found through sad experience that preaching cave conservation to the public doesn't protect the cave. There are always a few who disregard the appeal—and that's all it takes to spoil a cave.

However, we would be happy to welcome any interested readers of DESERT who would like to try caving for themselves to our trips and meetings. We meet on the first Tuesday of every month at the Pasadena Public Library lecture room, at 7:45 p.m. Any inquiries could be directed to Dick Reardon, 317 S. Fifth Avenue, Arcadia, HI 6-3043, Erlon Porter, 6115 Pinecrest Drive, Highland Park, CL 7-4851, or myself.

Sincerely,
LILLIAN CASLER
2041 Meadowbrook Rd.
Altadena, California



ON THE HOHOKAM TRAIL

By
Cloyd Sorensen, Jr.

FOR THE past four winters there has been feverish archeological activity in the desert country above the new Painted Rock Dam in southwest Arizona. Archeologist W. W. Wasley and his assistants are racing against time and rising waters of the normally dry Gila River, to save all of historic value that can be saved.

This area is the site of many ruins of the mysterious Hohokams ("Those Who Have Gone"), whose civilization developed around Christ's time and lasted for some 1400 years. Declining, it apparently evolved into the culture of the present-day Pimas and Papagos.

Just north of Gila Bend is the site of the Hohokam Pyramid—the only such structure in Southwestern U.S.

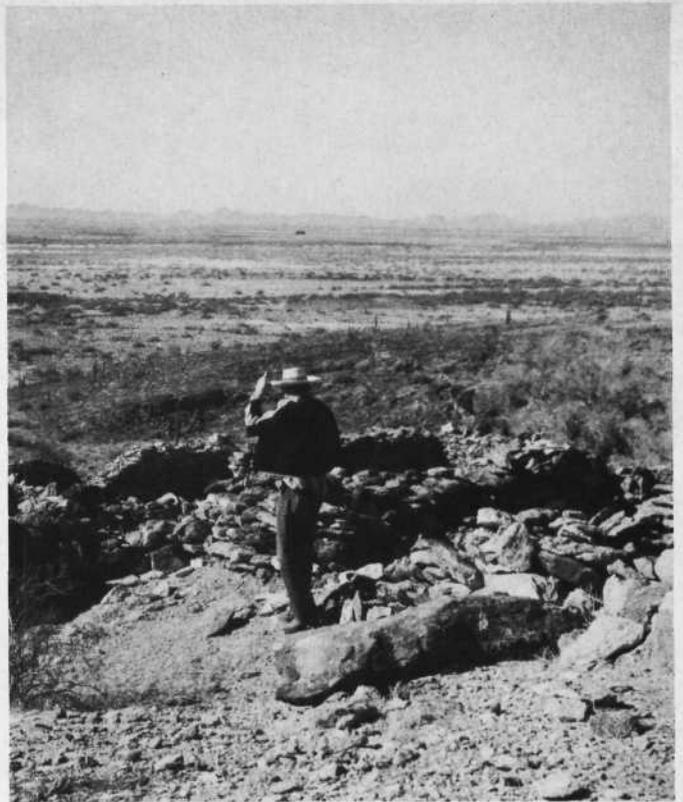
The graded road runs beyond the Pyramid and the ruins of a stage station to a gravel pit (see map). From here you must put your desert buggy into four-wheel-drive. A recently bladed road runs through several Hohokam village sites, and on to "Jumpoff Mountain," which towers over the desert plain. A still-visible Hohokam trail leads to the Fortified Village atop the hill. Ruins of this 700-year-old stone fortress are extensive.

Climax of a four-wheel-drive outing to Dendora Valley is Painted Rock Dam and the nearby boulders literally covered with Hohokam petroglyphs.

It is a 70-mile roundtrip from Gila Bend to the Dam. All the precautions of desert travel should be observed. ///



DR. W. W. WASLEY, FIELD ARCHEOLOGIST FOR ARIZONA STATE MUSEUM, LECTURES ON A HOHOKAM CEREMONIAL VILLAGE DURING A RECENT TOUR OF DENDORA VALLEY. THE HOHOKAMS HAD EXTENSIVE IRRIGATION CANALS AND A "MEXICAN TYPE" PYRAMID.

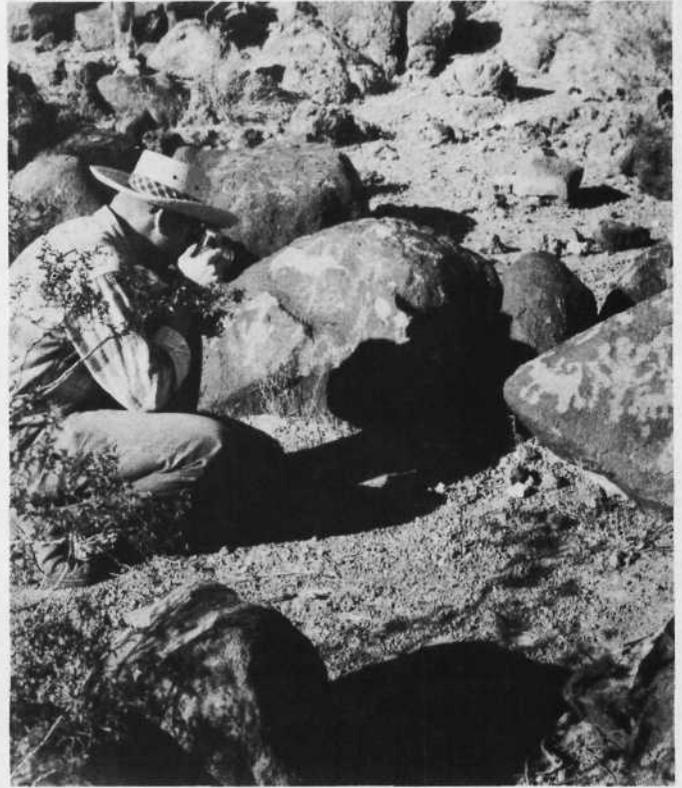


HOHOKAM STONE FORTRESS ATOP JUMPOFF MOUNTAIN. MESA IS COVERED WITH RUINS OF MANY HOME AND FORT SITES. ALONG THE WINDING TRAIL LEADING TO JUMPOFF SUMMIT ARE PETROGLYPHS AND A GREAT MANY ONCE-OCCUPIED CAVES.

THE DENDORA VALLEY OUTING PROVIDED SOME DUSTY AND LIVELY JEEP ACTION. THIS AREA IS STILL THE HOME OF A SMALL HERD OF MUSTANGS AND SOME FERAL BURROS.



EARLY SPANISH EXPLORERS FIRST DESCRIBED THE "PAINTED ROCKS." LATER, AREA WAS A STAGE LINE REST STOP, AND PASSENGERS WERE ALLOWED TO INSPECT THE "PICTURE GALLERY."





THE SOLITARY 'COW-KILLER'

— By EDMUND C. JAEGER —

ONE DAY of a long-ago autumn I found myself almost instinctively journeying toward the hill pastures to make my animals ready for travel. Next morning, while the aroma of the greasewood and sumac was heavy on the air, I was on my way, bound for the desert mountains of Southern California.

As I rode along I came upon little parties of Indians. Some were camped on the roadside, others were

trudging along on ponies or in wagons toward the hill country where there was to be a fiesta at San Ignacio. These Indians, happy as jays, were dressed in bright colors of calicos and woolens.

As they traveled, the old men sat on the wagon seats and the women and children on straw in the wagon beds, while the bigger boys and young men rode alongside on ponies. Never will I forget that brightly

dressed, laughing-eyed little girl who chewed corn on the cob and kept smiling at me.

For making a journey interesting, there is nothing like having a definite, worthwhile destination. Up to this time I had had none in mind, and I decided that I, too, would go to the fiesta.

As I neared the reservation at Caahuilla, a splendid looking young Indian boy of about 16 rode up and

joined me. He had been away to school, he said, and wanted to talk to white people so he could learn to speak English better.

Realizing that these young Indian boys often are well versed in nature lore, I was only too glad to engage Ortego in conversation.

"See there," he said, pointing to the ground. "Don't you see that thing crawling in the dust? They are very bad, and you must never sleep on the ground if you ever see any of them around. They bite and sting, and if you are badly stung you must die."

It was a strange looking creature—a very large black-bodied ant, with abdomen well covered with a pile of deep reddish-brown hair—that Ortego pointed out to me.

"What do you call him?" I asked.

"Some people call him a cow-killer and many hereabouts call him man-killer, and I think that is the best name," said Ortego. "Did you ever see a white one that looks like a little wad of cotton crawling on the ground? The white ones are males and the red ones like that one are females. There are some man-killers too that have wings and some have short hair instead of long hair on their backs, but I don't think all of them sting and make you die, for once I was stung and it only made my arm hurt like fire for an hour or two."

The small insect was crawling very fast and nervously over the ground. I dismounted and caught it in my handkerchief—an act which caused my young Indian friend no little anxiety.

This was my introduction to this queer little insect, for though I had seen the "cow-killers" before, they had aroused no special curiosity. The statements that Ortego made concerning them are, for the most part, not to be taken as fact. The beliefs that he entertained concerning their poisonous nature are similar to those held by many rural people.

Though the cow-killers or man-killers appear like ants, they are in fact solitary wasps. They are plentiful over a great portion of the arid Southwest and may be met with in the desert and the mountain foothills, and up to at least an altitude of 5000 feet in the mountains proper. They seem to avoid damp places, and spend most of their existence on the driest, hottest exposures. As they run hurriedly about and display their fine velvety coats in the sunshine, there are few strollers who have not at

some time or other been attracted by them.

Little has been written on the mutillids, as these insects are properly called. Entomologists have not so far worked out the full life histories of many of our Western species. An opportunity to contribute greatly to Southwest science awaits the person who can devote time to observing these creatures and find out some definite things about the many obscure portions of their life history.

These hard-bodied insects are remarkably tenacious to life. If the soil is at all pulverized or sandy, a man can trample a mutillid, and instead of this insect suffering fatal injury, it straightens out its legs and moves off apparently as spry as ever.

Because of their stinging proclivities, solitary wasps are held in much dread by Navajo shepherders. These pastoral people spend a great deal of their time lying about on the ground, even during the daytime, and they frequently come in contact with such ground-dwelling insects. The mutillids are not aggressive with their weapons, as are bees and paper wasps, but at times when they are ruthlessly trampled upon or otherwise molested, they do not hesitate to bring the long needlelike stinger into use.

The stinging organ is surely a formidable appearing weapon, and if the insect were capable of thrusting it into our flesh to its full length the injury it might inflict would be considerable. I have seen a large mutillid unsheath a stinger fully three-eighths of an inch long. Only the wingless females are armed.

The males, fully winged, are less frequently seen than the females.

If you would know of the mutillid's ability as a "songster" and excavator, drop one into a cup into which you have placed a little sand. If the insect is disturbed with a stick, it will set up a high-pitched squeaky humming note, resembling the sound made by rubbing a wet finger about the rim of a wine glass. You will notice that as the fine birdlike note is made, black rings appear at about the middle of the furry abdomen. These are produced at a time of parting of the hairs and the exposure of the black exoskeleton as the rear half of the abdomen is rapidly vibrated. The sound is produced by the rubbing of a transversely striated area on the base of the third abdominal segment in and out of the second segment. The common note of high pitch is also used by the female to

attract a mate. Although I am not yet certain, I think another note may be made by forcing air out through the breathing tubes or spiracles.

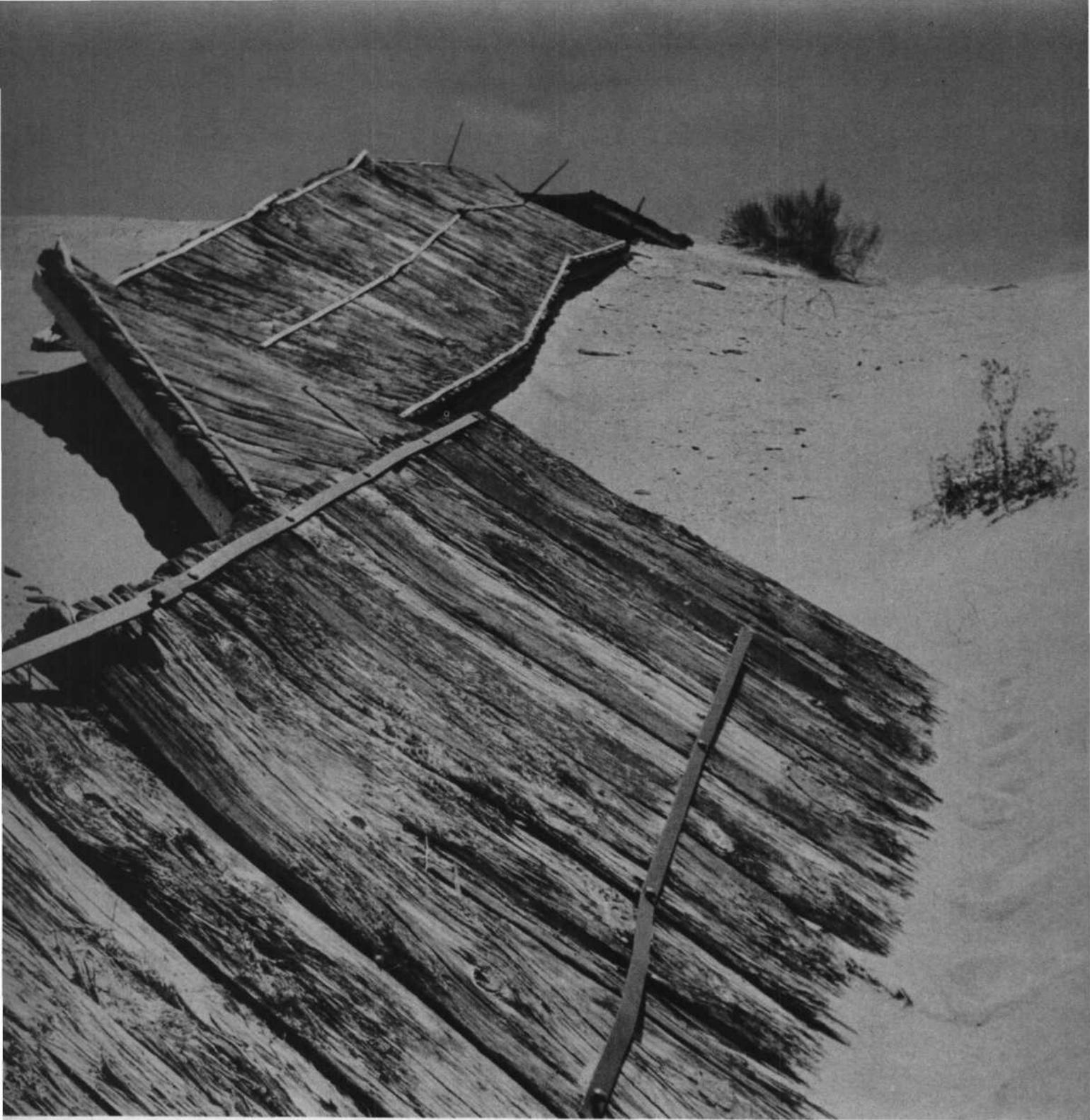
The great brilliance and prominence of the eyes of these wasps add much to their appearance of animation and intelligence. Either the eyes are very efficient organs or else the kinesthetic sense is well developed, for when I try to "chase" a mutillid into a bottle, it immediately sets up an "anger buzz" and tries to hide.

Escape is often attempted by digging into the soil. Burial is accomplished in a remarkable short time. This ability to dig into the earth quickly is of high importance to the female mutillid, for it is by digging that she exposes the cells of certain host wasps and finds a place to lay her eggs. In a general way it is known that these insects are parasites on Aculeate Hymenoptera (slender-waisted wasps), but few observers if any know much about the exact hosts. The adult female searches out a cocoon of a bee or wasp and lays an egg on the pupa within the cocoon. The egg hatches and the young larval mutillid feeds upon the pupa of the bee or wasp until full grown, then pupates within the cocoon. At the close of the pupal period it emerges as an adult mutillid wasp.

In making her toilet, the mutillid is most fastidious. Brushing and combing of the hair are frequently engaged in. The antennae are cleaned by bringing the forelegs down over them. The same legs are used in combing the head parts and upper thorax. The abdomen is brushed with the rear legs.

Facts are scarce concerning the feeding habits of the mutillids. I have seen the winged males feeding on flowers, but I have never yet been able to catch a feeding female. The female seems always to be on the move and so restless that it would appear that they never eat at all. Doubtless they do eat, and someday we will see them in the act.

There are many species of mutillids other than those commonly called velvet ants or cow-killers. Some are nocturnal and may be taken in great numbers about lights in the spring and summer. It is a very curious thing, though, that in the case of some of them we are able to collect only male specimens. Are the females really so rare as this would lead us to think, or is it that we have not discovered them because we do not know where they live? The last supposition is probably the true one. ///



REMNANTS OF THE OLD ROAD NOW LIE ROTTING IN THE SUN

OVER THE PLANK ROAD TO YUMA

By Helen M. Gilbert

A TRIP OVER the old plank road was one you couldn't forget! For many years this nightmare trail linking Holtville, California, and Yuma, Arizona, was the only "highway" across the Imperial Sand Hills. But, it was far better than the sandy nothing that had caused east-west travelers by foot and horse from earliest times to detour around this barrier. It was the impatient automobile that forced the ribbon of wood across the dunes.

This giant sand pile—known also as the Algodones Dunes and "America's Sahara"—is 40 miles long and two-to-six miles wide, forming the eastern flank of the rich Imperial Valley. Some of the individual hills in this complex rise 300 feet above the level of the mesa.

It is here that the sand buggies play today — stripped-down cars with huge tires that find the soft sand to their liking. And it is here that the sand-scoured and sun-scorched remnants of the old road await the relic collector—or the protection of a government agency.

"The old road went right over the dunes as far as your eye can see," the old-timer was telling me, pointing to torn, twisted sections of the road built a half-century ago. The planks zig-zagged toward the horizon, following the contour of the dunes. "For 10 years I traveled those planks," he said. "Some mighty interesting things happened out there."

I had gone to Yuma to talk to early settlers who remembered the old road. Even today, these old-timers will stop anything they are doing to reminisce over the plank road — it took hold of the imagination somehow, and one never forgot!

"Of course," A. J. Eddy was say-

ing, "the plank road we see today was not the first wooden trail across the sand."

Attorney Eddy was a young man in the garage business when the first planks were laid over the dunes, and he told about driving cars for people from the East who were afraid to tackle the narrow parallel tracks of the first wood road. Eddy would drive their cars to Holtville, then return to Yuma on the Inter-Cal train, via Mexicali and Algodones on the Mexican side of the border.

Writing in his new book, *When the Sands of the Desert Grew Gold*, Gordon Stuart describes the earlier roads:

"The first attempt at crossing the sand hills to Yuma was a brush-mat road. Ed Boyde was County Supervisor for the Holtville District. Ed spent \$3500 building the brush road. The first few heavy cars that passed over the road, ground it to bits. Then a cry went out from the taxpayers, 'wasted money.' The county was young and poor, and that was a lot of money; but there had to be a start. Give Ed Boyde credit for being a pioneer; he started something.

"Next came the planked road. Four 2x12-inch planks were laid down parallel; two on one side, and two on the other like rails on a railroad track; with cross ties to bind the ends of the planks. Wheels of a car ran on the planks until they hit a bank of sand that had blown in and covered the planks; then the car slid off the track. It was not difficult putting a Model T back onto the track; but when a heavier car slid off, the driver was forced to wait until another car came along, and cars did not pass often. There were turnouts at intervals to allow cars to pass."

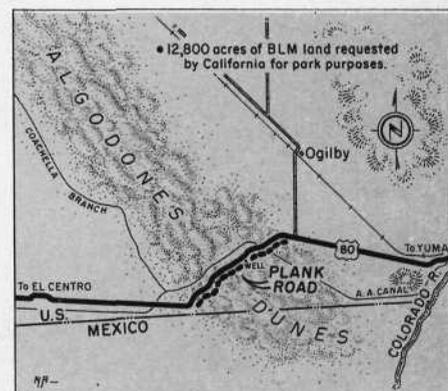
The first plank road—built in 1915—was financed in the main by public subscription. Frank Gray of Holtville remembers that the local merchants would go out to the dunes on Sundays to help in the work. Ranchers used teams and Fresno scrapers to level the sand ahead of the planking operation.

Further description of the way this job was accomplished is found in *The Valley Imperial*, by the late Jesse A. Bunch:

"The deciding factor came when San Diego offered to furnish the lumber for a direct road through the sand hills. Imperial County furnished food and paid for haulage from Ogilby. A camp was set up at Gray's Well, and Valley towns sent workers—anywhere from 10 to 50 men would show up for daily work, sometimes none. But finally, after six months of discouraging work, the first plank road was completed."

It lasted a year.

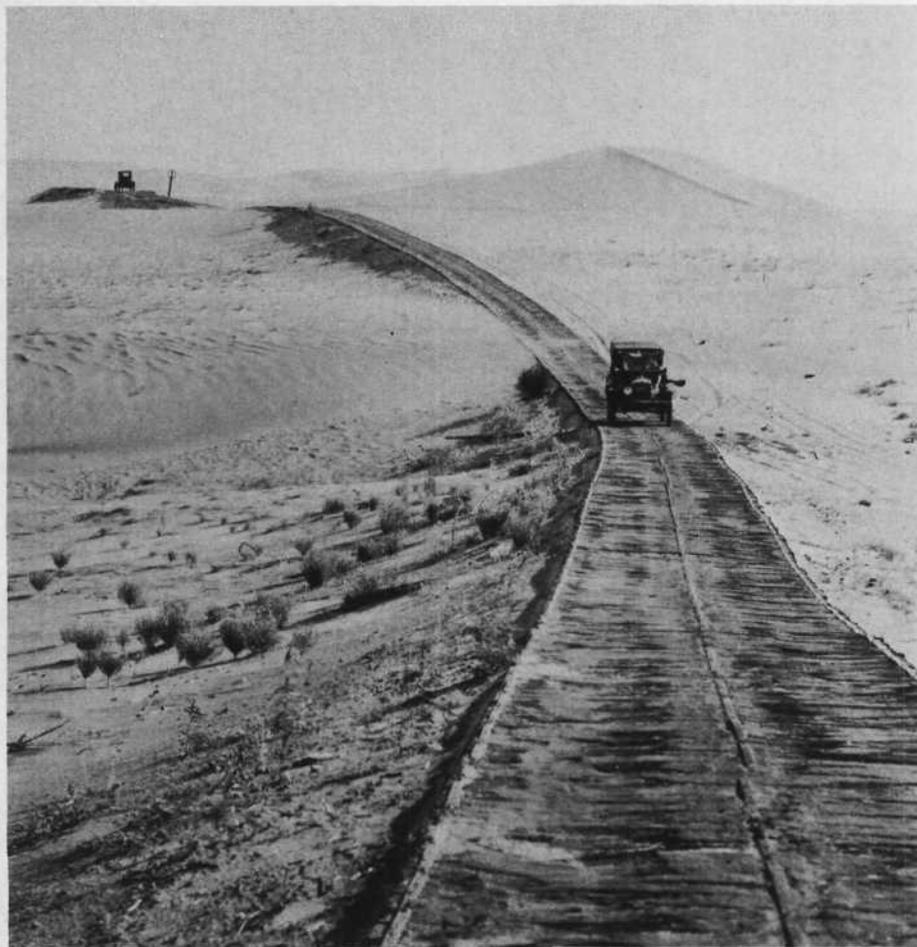
In 1916 the California Highway Commission built the improved plank road. A turnout, eight feet extra width, was built approximately every half-mile. According to the State Division of Highways, the road





COMPLETION OF THE FIRST ROAD OVER THE DUNES WAS CAUSE FOR CELEBRATION

A SECTION OF THE IMPROVED PLANK ROAD IN 1916



was too heavy to be moved easily, and the sand that drifted over it had to be cleared periodically by teams and scrapers. The state spent \$35,000 a year to keep this 7½ miles of roadway passable.

The most common hazard in traveling a one-way plank road was to meet a car coming from the opposite direction. If one of the turnouts was nearby, the closest car would back-up to it. But, if no turnout was in sight—and the drivers could not agree as to who was closest to the last turnouts each had passed—then the trick was for the cars to pass by keeping two of their wheels on the planks and two in the sand.

If a car “went under,” out of the trunk would come shovels, gunny sacks, ropes and perhaps a pair of old running boards used exclusively for the job at hand. Brush and sacks or running boards would go under the bogged tires. Then, with “everybody pushing,” the stuck car would be back on the road.

The “improved” plank road wore out in a year, and was replanked in 1917. But, pavement did not conquer the Algodones until 1926—and before that date, if you wanted to

drive the direct route from Imperial Valley to Yuma or vice versa, you had to drive over a thin ribbon of of wood.

Carl S. "Dad" Walker knew well the hazards of a trip over the plank road and was always prepared for whatever trouble he might encounter. Walker is owner of the Gold Rock Ranch and Mine in the Cargo Muchachos. As we sat around the old wood stove in the pleasant living room of his home, five miles north of Ogilby, he related a trip he made in 1925:

"I was on my way from Los Angeles to the mine. The road was paved as far as Gray's Well, west of the dunes, but we still had to use the planks through the sand dunes. It just so happened that a movie company was filming 'Beau Geste' at that time, and many sightseers came to watch the activities. Before long, traffic on the one-way road was hopelessly piled-up for miles.

"I got out on a turnout as far as I could, then gathered some dead greasewood, made a fire, and had a good steak.

"In order to clear the road, several men would get hold of the lighter cars, turn them around and head them back toward Yuma, but it was 2½ days before the tangle was all straightened out and I could go on my way."

In 1923 the state began extensive studies of desert road problems. Engineer E. Q. Sullivan undertook surveys of the movement of sand during windstorms. His research led to the location of a permanent road on a grade line above the height of the smaller faster-moving dunes; and the building of a paved road on a fill of blow-sand. This feat is recognized as one of the most spectacular paving projects in America, and it is significant to note that Sullivan's alignment and grade line have not been changed in 35 years.

The 20-foot asphalt concrete road was started in 1925, and opened to traffic on August 14, 1926. The sand embankment that carries the road was constructed with a dragline. Two four-horse fresnoes leveled and shaped the top of the grade and the slopes. Only the top three feet of the sand fill was watered, and the trucks de-

livering asphalt concrete ran over planks laid on the sand subgrade.

The State Division of Beaches and Parks, with an eye toward preserving what Robert B. Hatch, supervisor of advance planning, terms "an ingenious relic," has applied for Federal lands encompassing the plank road—some 12,800 acres all told. This is roughly the area between the southerly border of the Navy's bombing range, and the Mexican border.

The State has had difficulty with this acquisition because Federal procedures for the disposal of BLM lands require that such lands be surveyed. Hatch reports that the necessary survey is nearly complete and that actual processing of the State's application should be in progress shortly.

"With the existing State highway running so close to the original," said Hatch, "I am sure that the contrast will be terrific — especially since portions of the plank road are rather close to the new highway."

The acquisition of Federal lands is a slow process. Hatch's best guess is that the people of California will once again own the historic wooden road by September, 1962. ///

AS A SAFETY MARGIN WHILE CROSSING THE DUNES, CARS USUALLY TRAVELED IN CARAVANS



Gold, Greed and a Grave

By CLYDE FORSYTHE*

WE HAD DRIVEN across the sage-grown flats of Holcomb Valley to the edge of the deep forest, and at a signal from Uncle Mac, stopped in the shade of a huge pine tree. The grizzled, gaunt old miner climbed out of the front seat and slowly set off into dark depths, and no sound except the crunch of our shoes in the gravel disturbed the silence. At long last, near the foot of a low mountain, Uncle Mac led us up the slope of a shaded knoll and to the

pine tree of which he had spoken. He had led us to a grave.

But this is not the start of my story. It begins in Bess Thomas' hardware store at Pine Knot, Big Bear Lake, California, about the year 1925. Bess was a "native," and she knew the mountains and the people. Bess was a widow.

This day she said, "You know, we ought to go over to Holcomb and take some fresh fruit and vegetables to Uncle Mac; he hasn't had any for several weeks, and the old boy needs a filling of fresh stuff to keep him in shape."

My wife Cotta and I knew of no Uncle Mac, and we so declared.

"He is an old miner named McElroy," said Bess. "He's lived in a shack in Holcomb for years—placer mining—and hoping to find the Mother Lode that had impregnated the decomposed granite of the valley floor with gold dust and nuggets."

No miner had ever found this lode. The experts have said that time and the elements have eroded the values into the valley floor from whence sweating, toiling men with bent backs and small tools have, over the years, extracted the paying quantities of the yellow metal.

UNCLE MAC, we discovered when we met him, was an aged and pathetic link in a chain which joined the roaring past with the placid present—a worn and weak link, but real.

And to place old McElroy in proper perspective we must delve into some of the history of Southern California. Back to the year 1845! In the broad valleys west of the San Bernardino Mountains, men and women had established cattle ranges.

But the cattlemen were not at peace. Bands of Paiute Indians, mounted on stolen horses, emerged from the pine-clad mountains, raided the ranches, ran off stock, and killed whom they could. The widely scattered ranchers had no means of protection. As always in a cruel world, it was the survival of the fittest.

Pio Pico, last of the Mexican governors of California, selected a man: Don Benito Wilson, who has a mountain named after him.

To Don Benito the governor allotted 80 good men, and from these Benito selected a score. Well mounted and well armed, he led his stalwarts through Cajon Pass and to the Lucerne and the Cushenberry grades. Blazing their own trail up the pinyon-clad canyons, the doughty men-with-a-purpose came to a long valley on the very top of the range.

In the valley they found the Paiute raiders, and there was a fight. The settlers took a disputed but unanimous



UNCLE MAC McELROY AT THE KILLERS' GRAVE. NOTE CROSS ON TREE.

*Desert Magazine readers know Clyde Forsythe as the renowned Western artist whose Gold Strike series paintings appeared on the covers of this publication's June through September, 1960, issues.

decision. Wilson and a few men pursued the chief and three others down into the Mojave Desert, caught them, and that was that.

The party found the valley populated with bears. They named it Bear Valley—and so it is today. Also, they roped some bears and lived on bear steaks, now that the Paiute problem was settled.

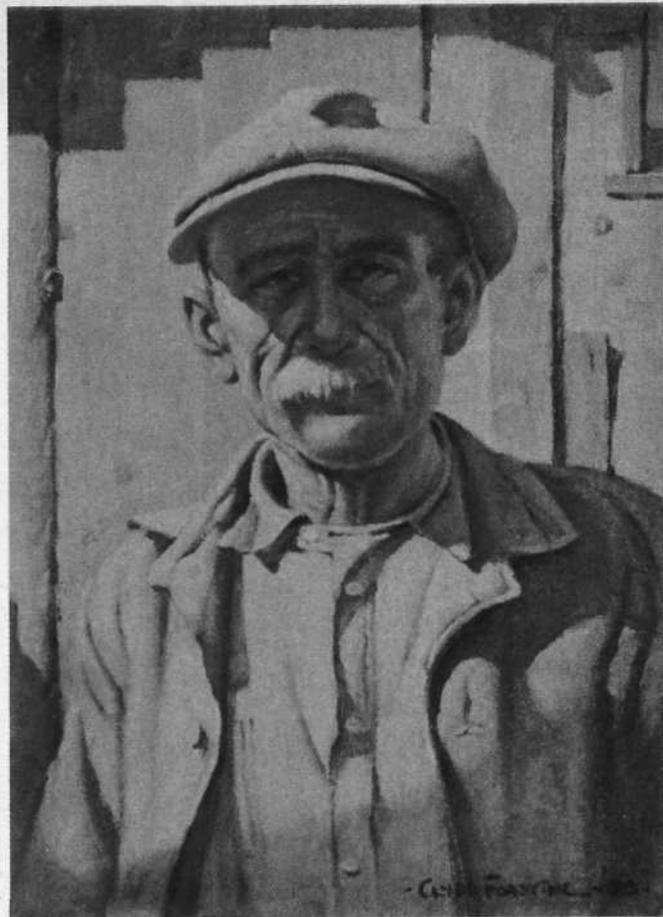
A GAIN A PAGE of history. In Indiana, in 1831, there was born a boy baby—William Holcomb. When Bill Holcomb became 28 years of age he made his way west to Oregon, saw nothing he wanted, and came south into California and on into Southern California, with the tall tales of gold ringing in his ears. At the village of Los Angeles, Bill fell in with a partner, a mountain man named Jack Martin. It was said that gold had been found at a place called Bear Valley, in the high mountains above a little Mormon settlement known as San Bernardino about 60 miles east of Los Angeles. And so Bill and Jack obtained a pack outfit, and laden with tools and grub they set out to try their luck.

They came into springtime snow and found a few miners who had made a small strike. About all Holcomb and Martin could find were some bear steaks on the hoof.

Bill Holcomb decided to scout the area, and taking his rifle he climbed the ridges on the north-side of Bear Valley. From a high point he saw another, smaller valley a couple of miles beyond. Next day one of the men of the Bear Valley party offered to go with Holcomb to the ridge and help bring in a bear that Bill had shot on his scouting trip. They proceeded further and came upon a small quartz ledge—then descended to the edge of “Holcomb’s Valley” (as they now jokingly called it) and found pockets of rich placer gold in the gullies. And now the boys swarmed in and staked their claims, and Holcomb Valley had been discovered and named!

How, and how quickly does the news of a new gold strike travel? It does travel—even where men live far apart and “fast communication” is by horseback. News of the Holcomb Valley strike got around, and men with pack outfits, laden with supplies, began the long, difficult climb to the 8000-foot-high El Dorado.

You weekend vacationers can drive up to Holcomb Valley from San Bernardino on paved highways in about an hour—and in high gear! For those men of 1860 the trip took days. Take a good look at the canyons as you whiz up City Creek grade and you will gain a new admiration for those early fortune hunters. And if you should happen to pitch your tent in the public campground at Fawnskin, take a moment out to realize that



FORSYTHE'S PORTRAIT OF UNCLE MAC

you are on soil over which many of those old timers dragged their weary feet.

THE MEN OF 1860 poured in—one hundred, five hundred, a thousand, fifteen hundred. The valley is only two miles long, and narrow. The ground was soon staked out with a carpet of claims, and gold pans and crude washers were busy from dawn to dusk. In the early 1920s I found two of these dry-washers in the forest, nearly concealed by a growth of brush. There were also a few log cabins, built by those who insisted on the comforts of home.

There were stores and saloons in the town of Holcomb and there ensued a fight between Holcomb and San Bernardino as to which would be the county seat. Holcomb lost the battle by a very narrow margin. But, the gold was the important thing, and the miners feverishly dug it out. They dug from spring until fall, when the winter snows drove them out en masse.

The spring thaw made little streams and pools, but when the snows are gone there is but little water in the valley. You will find today a number of small craters, 40 to 50 feet wide across the top and perhaps six to 10 feet deep, where men cast up the decomposed granite and worked out the gold. Big pines grew in most of them. There is little else remaining to indicate that here was once a roaring camp. Your own imagination will be as good as mine.

WITH THIS HAZY outline of the Holcomb camp in mind, we now return to Bess Thomas with her lug-box of fruits and vegetables stowed in the back of our Franklin car, and we head for Holcomb Valley to find and make glad the old timer, Uncle Mac.

He came out of his plank shack this sunny May after-



noon and greeted Bess with a joyful smile. He accepted us shyly, as her friends. A bent old figure of a man was Uncle Mac, gray handlebar moustache, deep lines in face and neck, gnarled hands; a man in the sundown days of life; alone. It was good for the heart to see the old fellow trying, with his few words, to thank Bess Thomas.

The hour we spent with Uncle Mac was a rewarding hour. We became friends. But how could we know that our friend was a living link in that chain stretching back from that day to the howling Holcomb of the 1860s?

We left Uncle Mac with the promise, "See you soon!" We took over Bess Thomas' ritual of the fruits-and-vegetables, and added steaks to old Mac's diet. Our studio-cabin on the north-side of Bear Lake attracted week-end guests, and we would take some of them to Holcomb to show off the site of a pioneer gold rush, and I would show off my self-admitted skill at panning out a bit of color from some riffle in a gully.

Always, of course, with a magnifying glass!

And always, of course, we'd supply Uncle Mac.

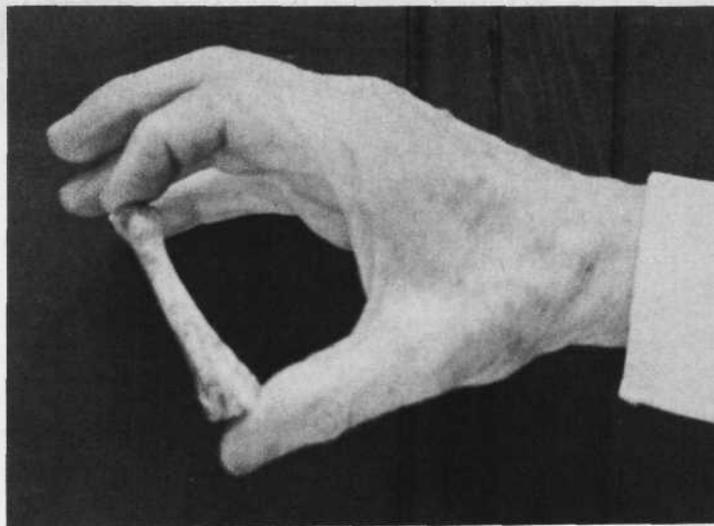
THEN CAME THE DAY. I think it was October of the following year that Bess Thomas took her day off and joined us on a trip to Holcomb. Uncle Mac put the vittles in his screened cooler. He was in a quiet, pensive mood this day.

Finally he spoke, and he spoke very slowly.

"I want to do sumpin' for you folks," he said. "I ain't got much to give, but I've got a story." He paused for a minute, considering his words. "I want to show you folks a grave . . . and tell you a story. Let's go across th' valley."

We got into the car and old Mac indicated an unused road winding through the sage, and as we drove slowly along he continued. And here I must say that the language of Uncle Mac is better than mine, for the telling, and I shall try to quote him . . . his color is simple and clear.

"You folks seem t'know somethin' of th' history of this here valley, how as they was a town an' a lot of likker an' such. Not hardly a sign of it left. That was back in the '60s and '70s. When I come here they was a few stragglers left, in cabins. No place else t' go. One of 'em got t' be my friend. He'd been through th' thick



THE BONE THAT THE BADGER DUG OUT

of it an' no better off than when he started. It was him that told me th' story I'm tellin' to you, an' him that showed me th' grave an' the cross on th' pine tree. Head fer th' forest over there."

Uncle Mac lapsed into silence, pointing the way. We soon came to the big pine where he had told me to park, and we followed him into the forest, single file. The forest was like any forest that is still and dark and undisturbed.

At the top of the little knoll there was a large pine tree. Uncle Mac stopped there and put a hand against the bark of the tree. After resting a moment, he looked up and spoke.

"You are standin' at the foot of the grave of two men," he said. There was no indication of a grave—only the soil and sage and shadow of the forest. He continued: "This here tree is th' headstone. See that cross, cut in the bark?" Now we saw it. A vertical cut with a short line near the top, but a cross, almost obliterated by 65 years of nature's healing.

AND NOW Uncle Mac launched into his story. He told it slowly, seemingly searching his memory as he went along.

"This is what my old friend told me," Uncle Mac continued. "He said he was mixed up in it. He said when Holcomb was goin' strong and th' gold was bein' taken out mighty fast an' plentiful, th' miners sure did celebrate in them saloons Saturday nights. Lot o' men would git roarin' drunk; no other ways to entertain theirselves.

"Then it happened! One mornin' they finds one o' th' boys lying in the woods, dead. He'd had a big poke full o' gold and he'd been awful drunk an' was one o' the last to stagger off to his camp. He'd been hit on th' head—his poke was gone.

"He'd been one o' th' best liked fellers in camp. It was plain t' see, we had a killer in Holcomb." Again Uncle Mac paused, thinking, then went on, quoting his friend. "They buried th' poor feller an' there was a mighty lot o' talk an' men a lookin' at each other an' wonderin'. They was men in camp nobody liked, mean lookin' and mean actin' men. Th' town constable had nothin' to go on—nothin', too many tracks leadin' every which way t' follow any of 'em."

At this point in his story Old Mac seemed a bit confused. He finally collected his thoughts and now re-



AUTHOR POSES AT A RELIC OF HOLCOMB'S GOLD RUSH DAYS

sumed the narrative in his own words, not trying to quote his friend.

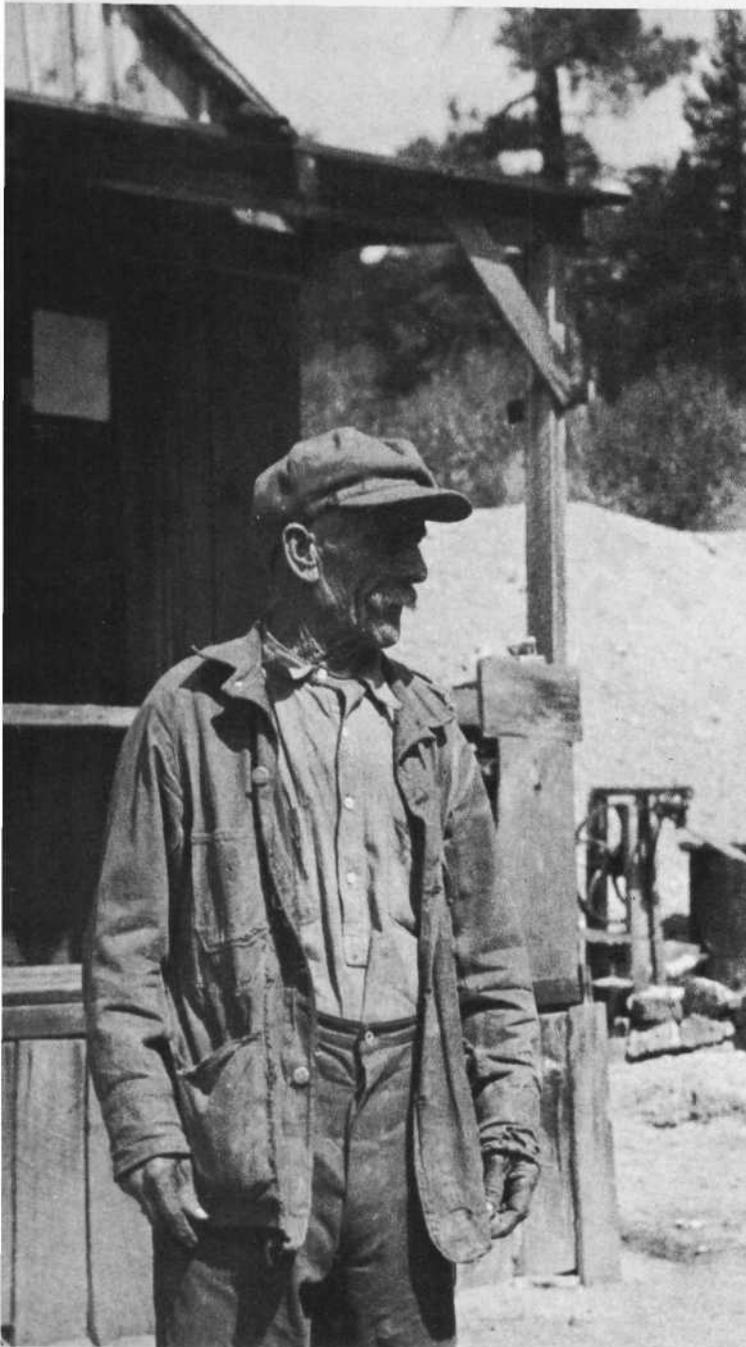
"As I recollect it, he said th' camp quieted down for quite a spell. There was nothin' could be done. Then one morning late in th' year somebody finds another miner dead in the forest, just like the other one. A drunk, with his poke gone.

"This time th' talk was quiet-like. Them two dead men had pardners an' they had friends, an' th' talk was like this; 'who'll be next?'"

UNCLE MAC HELD us in a fascinated silence. Now and then a jay bird squawked a protest at our presence.

The old man lapsed into another long pause. He slapped his shabby old cap against the tree, making little puffs of dust. The jay flew away, frustrated.

Then Uncle Mac continued, "So th' dead men's pard-



UNCLE MAC AT HIS HOLCOMB VALLEY CABIN

ner's and friends got t'gether. They talked a lot an' figgered out a scheme to trap th' killer.

"For a few weeks they spread talk in th' saloons that one of the dead men's pardners had hit it rich. He was s'posed t' carry a lot o' gold dust on him. Wouldn't risk leavin' it in camp. That talk got around an' it was mighty easy t' believe. Then one Saturday night they sprung th' trap. They was six of 'em, I think—an' no constable.

"This partner picks th' saloon where the worst of th' camp hangs out. He carries a fat poke an' he starts gittin' awful drunk. That's th' way it looks, but he's dumpin' his likker on th' sawdust; he's stayin' sober. He's one o' the last t' leave, an' he finally staggers out into th' forest toward his camp.

"They'd picked a dark night an' they was hid behind trees on both sides o' the trail. A half mile from town it happened."

COTTA AND I had exchanged a few glances—and we later confessed that we were wondering if Old Mac might be having fun with us.

Uncle Mac continued: "This feller supposed t' be drunk keeps a sharp eye peeled, an' back up the trail he sees two men comin' an' gainin' on him. When they gets fairly close, he gives a loud whistle. Then th' boys close in from both sides an' they've got 'em."

Old Mac paused again at this point, and it seemed that he had about reached the end. I had wrongly guessed that the grave contained the body of one of the murdered miners. I had assumed the men took these killers back to the law in camp.

"They made 'em confess, they did. A ways off they had a horse an' they got him an' they put those two on 'im an' they took 'em across th' valley to this very place. They had picks an' shovels, an' they set them two men to diggin' a grave. Right here—foot o' this tree.

"My friend says they told 'em to quit beggin' an' dig faster. Finally they gets that hole dug deep enough t' suit . . . an' they stands 'em up on one side an' lets 'em have it! They died quick, of lead poisoning.

"One o' the boys had a hatchet an' a little religion an' he hacked this here cross on th' tree."

UNCLE MAC'S narrative ended here. Our redundant comments drifted off on the lazy breeze with the harsh notes of the jay. Cotta and I had to take Bess to Pine Knot where I would treat us to T-bone steaks at Ma Gates' cafe, and we would hustle back to our cabin on the north-side of the lake and build a log fire. As we turned to leave, old Mac spoke again.

"You've thanked me plenty. There's just one more thing I wanta tell about this. See that hole under that bush? Deserted badger hole. A few times in th' spring I've come along here an' that badger'd come out o' hibernation an' pushed out a pile o' dirt. Couple o' times I found bones lyin' here! Queer place fer a badger t' hole up."

The old man started down the slope. My curiosity put me down on my hands and knees and I raked out the shallow hole, pine needles, twigs, pebbles and—a bone! I laid it on the back of my hand—a bone from the hand of a man.

Even at this late day I am confident that I have repeated the story with accuracy. Uncle Mac's words and the action they described burned into my memory, indelibly. ///



AN UNPAID BOARD BILL

and a sure-footed burro are the chief ingredients in the story of one of the Southwest's greatest gold producers.

The year was 1904, and my husband, Fred J. Eddy, and I were camped at a prospect near Cottonwood Springs west of Kingman. Mr. Eddy, who had succumbed to "gold fever" in the Klondike Rush of '98, had come to northwest Arizona to determine if our Cottonwood Springs property would be worth developing. With us were our two children — three-year-old May and six-month-old Maud.

One of the men we hired to sharpen tools was a prospector named Ely Hilty. He and his brother, who hauled water to our camp from the spring, told us about a claim they had at a place five miles distant. The Hiltys were about to lose this property because they had offered it as security on a board bill owed in Kingman. It was a good prospect, the Hilty boys insisted, and it would be a shame to see it lost because of a piddling bill.

Next morning, we put the side-saddle on one of the burros, I took

the baby in my arms and lifted the three-year-old behind me, and we were off. My husband, with the Hiltys' map in hand, walked.

The gold-bearing vein on the Hiltys' prospect was only a few inches wide at the top of the shaft, but showed signs of widening as it angled into the earth.

We chipped several pieces of ore from various places along the exposed vein, and ground the samples in our mortar. Then, using a cow's horn split lengthwise, we panned it out.

From the first panning to the last made on that beautiful spring day, every sampling showed free gold! That night we made our beds on the ground, and tired but happy, drifted off to sleep under the sparkling desert stars.

Upon our return to Cottonwood camp, we drew up an option which the Hiltys signed. The second thing we did was pay their board bill.

In 10 days' time we had a 10-man crew working the new prospect. The deeper they sank the shaft, the better the ore. When it became obvious beyond a doubt that this mine had real potential, we returned to California to raise the capital necessary for development work.

The Pasadena Consolidated Company was formed, and the Hiltys were given a block of stock and some cash

for their option. Many Pasadena businessmen came to us to buy stock — this was not just another promotional deal; we did not *ask* anyone to invest a penny.

As the miners continued their work, the ore continued to improve. In a very short time the stock went from 10c to several dollars a share.

My husband was president and general manager, and his plan from the start was to keep the mine clear of debt. But, some of the other directors insisted on mortgaging the mine to build a mill on the site. After some dissension, my husband resigned. The company was reorganized, and in 1906 the mine renamed the "Tom Reed."

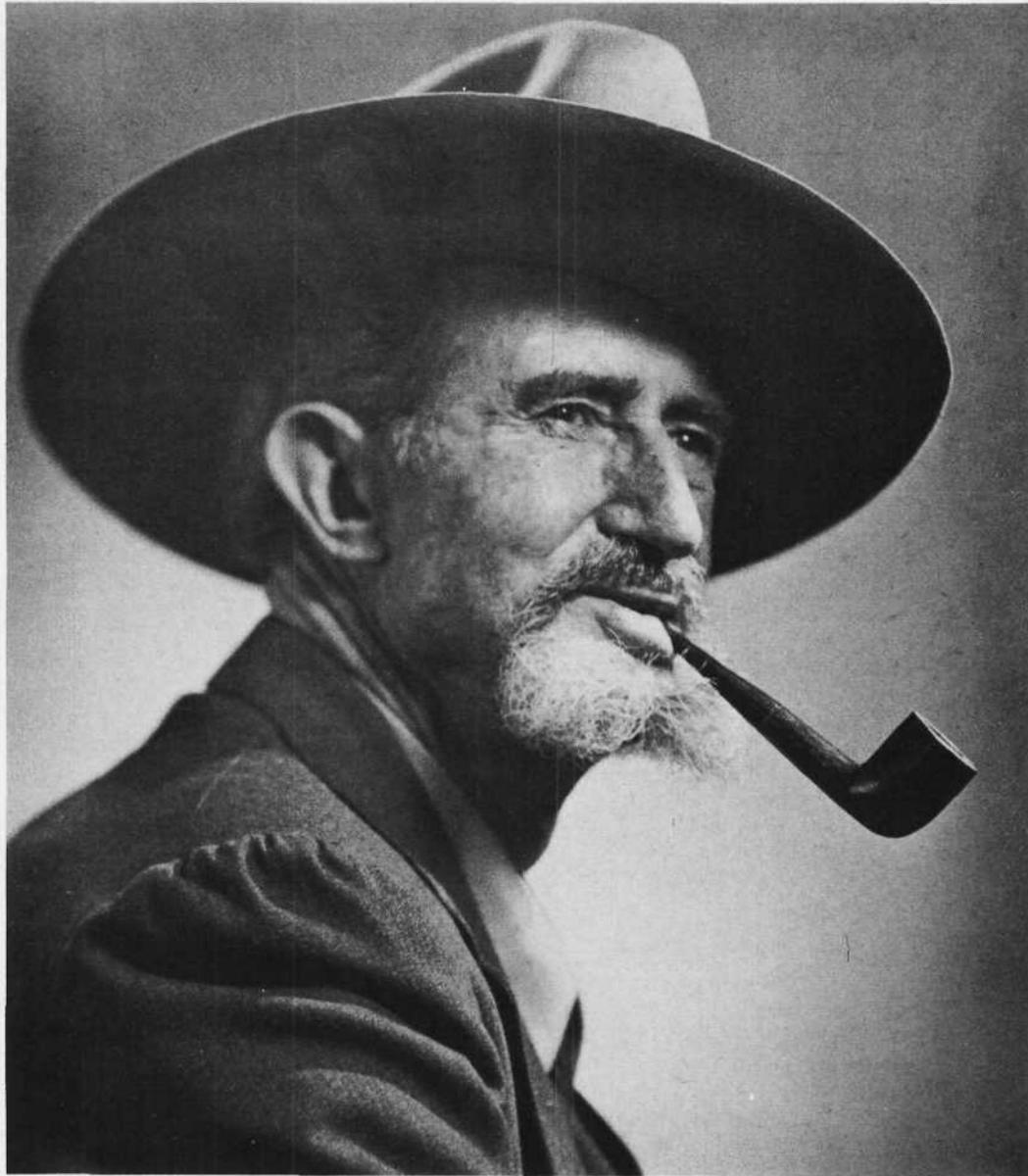
In less than four years after my burro ride over the nearly-trackless Arizona desert, the Tom Reed and the nearby United Eastern Mine drew 12,000 residents to the area, and the town of Oatman was created. During this short period, \$18,000,000 in gold was taken from the ground upon which we had slept that long-ago night.

The Hiltys never again had to sharpen tools and haul water. My husband and I turned our efforts toward developing a 560-acre ranch in the Imperial Valley of California, then being reclaimed with water from the Colorado — but that is another story.—MARGARET EDDY WARD, of Palm Desert, Calif.



A SILVER ANNIVERSARY BONUS FEATURE

Reprinted from *DESERT's* First Issue: November 1937



"DESERT STEVE" RAGSDALE OF DESERT CENTER, CALIFORNIA

He Helps Keep Chuckawalla Dry

By
RANDALL HENDERSON

"YES MA'AM! We used to have lots of rattlesnakes here. The country was alive with them. They crawled around in armies and ate everything in their path. Few

people ever got out of the desert alive in those days. But they are all gone now. Haven't seen one for years. What became of them? Well, Henry Ford is responsible. When he got to

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HORSE SHOW**

making all those little cars a few years ago this road across the Chuckawalla Valley became so crooked that a cow pony couldn't follow it. Nothing but Fords ever tried to cross this way. They zig-zagged along through the sand and when the rattlers would start chasing them the blankety snakes would break their backs making the turns. They're all gone now."

This is Steve Ragsdale's yarn — "Desert Steve" of Desert Center. Nearly every one who has traveled Highway 60 across the Chuckawalla Desert in Southern California has heard of Desert Steve.

He has a story for every occasion. This is the one he told in the early days when timid folks from Eastern centers of tenderfoot culture would stop at the Ragsdale service station to inquire about the danger of Indians, outlaws and rattlesnakes.

The California link in Highway 60 is paved now and thousands of motorists roll along its smooth surface every week without thought of the hazards which once beset the desert traveler.

Steve Ragsdale is one of the pioneers along this highway. He was doing very well as a cotton rancher in the Palo Verde Valley until the post-war slump hit the cotton market. He couldn't feed his wife and four children with six-cent cotton, and so he turned the ranch over to the tax collector and announced that he was going to open up a service station at Gruendyke's Well, midway between Blythe and Mecca on the old Chuckawalla road.

Folks laughed at Steve, and felt sorry for his family. The road across the Chuckawalla in those days consisted of two rather uncertain ruts across 90 miles of blow sand and cross-washes. It required nine hours of hard driving to cover the 90 miles. Only the hardest of motorists would attempt the trip. There were many days when not a single car was to be met along this route. Six automobiles in 24 hours was heavy traffic.

But Mrs. Ragsdale was willing, and the four children were too young to vote on the question—so they loaded up the furniture and went out to rebuild the little cabin which Old Man Gruendyke had left when he proved up on his homestead.

This was in 1921. During the next four years they stuck to the job through summer heat and sandstorms. A little work had been done on the road, and travel was increasing. The Ragsdales had begun to feel that perhaps their pioneering would be rewarded.

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Nuff sed. S. A. RAGSDALE (Desert Steve), Warner

RAGSDALE TURNED TO POETRY TO PROTECT WILDLIFE OF SANTA ROSA MOUNTAIN, WHERE HE BUILT A SUMMER RETREAT

Then the state took over the highway and engineers decided that the Chuckawalla road should be rerouted to avoid the heavy sand. Gruendyke's Well was to be a mile and a quarter from the new highway.

This was heart-breaking news to the Ragsdales. Instead of crying about the injustice of the government and clamoring for damages, Steve went out and helped the engineers locate the new road.

Then he began preparations to move his service station. The main problem was water. It is a scarce commodity in the Chuckawalla Valley. With a hand windlass and the help of his family Ragsdale dug nine

holes—all of them dry. Then he brought in a well drilling outfit and found water at 423 feet. It cost \$12,000 to develop the new well. His difficulties in raising the twelve thousand make a story more thrilling than fiction.

A new location called for a new name—and so Desert Center was born.

Today an average of 500 cars a day pass through the little settlement on the Chuckawalla desert. It is a one-man town. Desert Steve not only owns all the real estate, but he is also the law. For many years he has been a deputy sheriff not only in Riverside County, but also in San Bernardino and Imperial counties.

At one time he thought of subdividing his 700-acre homestead and selling part of it. But he wanted the deeds to carry restrictions against liquor, gambling and wild women. He wanted them drawn so that a man could not even take a drink of his own beer on a lot bought from Steve Ragsdale. The lawyers said that was going too far. It couldn't be done. So the elegant plans which the engineers and architects had prepared were shoved into a pigeonhole—and are still there.

Steve isn't a pink tea reformer. There are notches on his gun, put there under justifiable circumstances. But he regards liquor, gambling and

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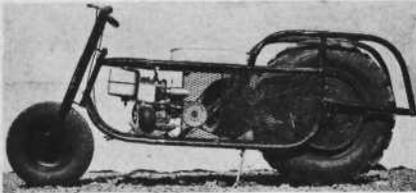
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prostitution as unnecessary vices, and they will never be tolerated on his domain. When thousands of men came out to work on the Colorado River aqueduct which is routed near Desert Center, Ragsdale was offered \$5,000 for a beer garden concession.

"I turned it down," he explained, "because no person could afford to pay so high a price for the privilege of selling beer at Desert Center. I knew how they intended to get their money back if they obtained the lease. I will not have any honkytonks at Desert Center—not at any price."

Ragsdale's antipathy toward commercialized vice is natural. It is a carryover from the days when he was a parson. He was born in Coffeyville, Kansas, but spent most of his early life in Missouri where he went to theological seminary and became an ordained minister of the Methodist church.

That was in the old fire and brimstone days—and Steven Ragsdale was a young volcano in the pulpit. In his inner heart, however, he never could quite accept the idea that the mountains and rivers and forests were made literally in six 24-hour days. And since, in his time and place it was heresy to believe otherwise, he finally resigned his pastorate and went into the lead mines to make his livelihood.

In 1908 he moved with his wife to California and in 1909 filed on a homestead in the Palo Verde Valley.

Despite his religious schooling, Desert Steve has two vices. Those tall yarns with which he entertains the tenderfoot visitors at Desert Center constitute one of them. The other is — poetry. He writes the world's worst verse.

The irony of it is that while there are countless numbers of fine poets whose genius goes unrewarded, Desert Steve makes money out of his rhymes. He uses them for advertising purposes. There is a homely philosophy in Steve's doggerel which appeals to folks despite its bad technique.

One incident in Ragsdale's experience throws a great light on the character of the man. His life's desire was that his children should have a thorough education. Business in Desert Center has prospered in recent years, and there were ample funds to carry the young Ragsdales through college.

When the time came for Stanley, the youngest boy, to take his advanced training, he rebelled. Before the first semester was finished at Riverside Junior College, he returned

home and told his parents that he had enough. He wanted to go to work and "do something useful."

Steve and the boy's mother urged and pleaded — but that was that. Finally the elder Ragsdale called his oldest son, Therman, into the conspiracy to help put Stanley back in school.

"Dad, why don't you go to college?"

This was Therman's suggestion. Dad did not know whether to laugh or get mad. It is not pleasant to be ridiculed by one's own children.

"I mean it," insisted Therman. And he finally convinced his father that he did mean it, and that the suggestion offered a possible solution to the problem which was confronting the Ragsdale family.

The outcome of it all was that when the next semester opened at the Riverside college, Mr. and Mrs. Ragsdale and their youngest son were all enrolled for classes. Father Ragsdale, 53 years of age, reported for astronomy, psychology, English and philosophy. Mother Ragsdale took art and astronomy.

Unfortunately, the younger member of the family was taken ill and could not carry on through the course. But Pa and Ma lugged their textbooks to school every day until the last examination was given.

"It was the greatest experience in my life," declared Ragsdale afterward. "The thing which I appreciated more than all else was that throughout the entire time we were in school there was not the slightest hint of discourtesy or ridicule from either student or teacher. No one can tell me there is anything wrong with the younger generation of Americans. I put them to the test, and I know the answer."

Recently Mr. and Mrs. Ragsdale bought 560 acres of fine timber on the top of Santa Rosa peak, and built a big log cabin where they spend much of their time while Therman runs the business at Desert Center and supervises the operation of branch stations at Utopia and Cactus City, which are also Ragsdale towns on Highway 60.

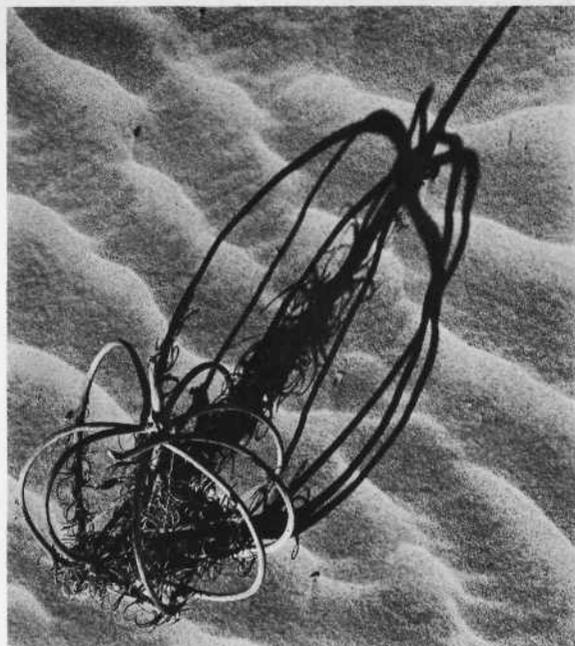
Steve's mountain domain is posted with placards advising visitors that

**"DECENT FOLKS ARE
WELCOME; ENJOY BUT
DON'T DESTROY"**

Beneath these black-faced lines are a few lines of Steve's own poetry. "But the blankety-blank souvenir hunters keep stealing the poems off the trees," complains Steve. ///

Wildflowers In February? There's A Good Chance!

By LUCILE WEIGHT



EVEN WHEN DEAD, THE DUNE PRIMROSE IS BEAUTIFUL. OUTER LEAVES CURL INWARD TO FORM A "DESERT BASKET."

I CANNOT POINT out, in the manner of a bus-driver conducting a tour . . . "Now along this highway you have acres of *blank* flowers at the peak of bloom; next week, we will travel on Highway *Soanso* where we'll see 15 species just coming into flower . . ."

Except for a Great Flower Year, desert bloom cannot be predicted far in advance. Those unusual years—usually a decade apart—are foreshadowed as early as December and early January. There is a chance—just a chance—that 1962 will be a Great Flower Year. January rainfall will determine this.

Normally, too many factors enter into the picture, and conditions over the Colorado and Mojave deserts of California vary too widely to predict flowers for February and early March—from the vantage view of early January, when this is being written. If there were rain gauges scattered along strategic desert highways, it would

make a more reasonable basis for prediction. There may be a half-inch rain in downtown Yucca Valley, and five miles east you might reach a north-south line beyond which not a single drop has fallen.

So, if I were going to the desert in February—to see the Date Festival in Indio or just to get away from city smog—and if I had no up-to-the-minute reports from desert friends or chambers of commerce or the *DESERT* office (FI 6-8037), there are several roads I'd try.

These would all be in low elevations, and that means Borrego, Imperial and Coachella Valleys, and extending up the Colorado River valleys as far as I saw any hint of green; then I'd skip over the intervening desert ranges of the Mojave, to Death Valley, the other really low elevation spot. Spring does not move gradually north in the desert. We must consider the matters of elevation, which determines temperature levels; local

topography (windward sides of ranges may have received good rains while those to the leeward may have remained entirely dry); and catch basins where runoff has stood long enough to penetrate deeply.

So—if I had a helicopter—I would set it down in February on Highway 80 between Holtville and the Algodones Dunes first. This is about as far south as you can get on the U.S. side of the border, and it approaches the Colorado River where mild winters are the rule.

I'd probably first notice the frost-green edging of plantain (Indian Wheat); desert lilies might be coming up, if not actually blooming. Some sand-verbena and white dune evening primrose should be starting in the sandy area with the lilies. There might even be some desert sunflower (*Geraea*) this early. On terraces of pebbles and rocks, such as between Pilot Knob and the Cargo

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Muchacho Mountains, ocotillo should be leafed, and if it has rained not long before some might be blooming. Then in the warm protected spots north of Highway 80, such as canyons and basins northwest of Imperial Dam, south and southeast coves of the Cargo Muchachos, beavertail cactus should at least be budded; also the small lupine, phacelias and buckwheats will be starting. Nearly anywhere in this general area, some creosote may be blooming.

Another border road often very early for flowers is south of Highway 80, between Calexico and its junction with Highway 80 near Ocotillo. Here in sandy places, desert lilies, brown-eyed and dune evening primroses and verbena often jump the gun on the rest of Imperial Valley.

Those who leave the highways may find desert lilies blooming lonely among the dunes and badlands. Sometimes they are up by New Year's in the Superstition Mountain area west of Imperial, and warm weather could force bloom by late February. Look for them also along Highway 99, to the lower turnoff to Borrego Valley.

The December rains in the Santa Rosa Mountains spreading over Borrego, means that desert sunflower, phacelia, gillias, desert dandelions, loco, pincushion and coreopsis will be blossoming in February. If these are not in evidence from the car, stop and walk. Then you may find the exquisite early miniatures such as desert star, mimulus, eriophyllum, or even an orchid five-spot mallow. The earliest cactus, beavertail, may be started in the rocky little passes leading into Borrego. The mass-show flowers in Borrego are verbena and primrose, but their appearance will be even more determined by rainfall than the ones named above.

FOR THE DREAMER

By Grace Shattuck Bail

*Where the organ cactus plays
Through the lofty desert ways
Near the catsclaw and mesquite
Where the creosote is sweet.*

*There the ruby sun is sinking
And one infant star is blinking
Where caliche strands are gleaming,
Desert lands are made for dreaming.*

*Desert, with your blue skies,
Tell me if your pathways lead
To a rainbow for the artist,
For the dreamer, dreams indeed!*

Best early bets in Coachella Valley are verbena and geraea, especially on Highway 111 in the Point Happy - La Quinta area, on Highway 99 in the Valerie Jean - Oasis area, and east of Mecca and along the dirt road parallel with the All - American branch canal towards Dos Palmas and any other stretches of canal road you find open. Later in the spring the canal road will give the traveler a wonderful view of blooming palo-verdes. Many people have found perfect little campsites among them just below the canal.

I have often been disappointed along the Salton Sea North Shore, but nearly always there are locos in late February. In good years, there are early patches of verbena, brown-eyed primrose and geraea.

Continuing east from Mecca, through Box Canyon, we are climbing toward the Mojave border, so except for outstanding years, the perennials such as crimson chuparosa, Fremont peppergrass and burro-fat (Isomeris) provide the earliest bloom.

Reaching Highway 60-70 we are just about on the border between the two deserts—and it is about as hard to predict bloom here as it is for a weatherman to give reports at a "border" station between two climatic belts. Sometimes plantain carpets the highway shoulders by late January, providing a light - green background for the many species seen along here later. Earliest flowers, usually found in little washes and basins where water drainage is most favorable, include incense bush (encelia), geraea, loco, coreopsis, evening primrose, apricot mallow, desert lavender, and possibly ocotillo.

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Monument and High Desert communities west and north of it in December, so it will pay to turn onto the Monument road from Highway 60-70 and check lower Cottonwood Canyon for such species as desert dandelion, brown-eyed evening primrose and small lupine, also chuparosa.

Returning to the upper Coachella Valley, encelia, which was leafing in December below Morongo Canyon, may be starting to bloom, and verbena along Highway 60-70-99 just below Whitewater often blooms in February.

In Death Valley look for earliest bloom in Jubilee Pass, the entrance from near Shoshone, and at Death Valley Buttes on the Valley side of Daylight Pass — the entrance from Beatty. In the former area, there should be desert star (if you look hard), blazing star, rock daisy (yes, around the rocks), geraea, suncup, evening primrose, ghostflower, poppy, verbena, phacelia, mimulus and encelia. Fewer species are likely at the northern pass, but there should be evening primrose, ghostflower, phacelias and mimulus. Check at Monument headquarters near Furnace Creek Ranch for best locations this year. In February 1961, according to Chief Park Naturalist Bill Bullard, about 30 species were blooming at the end of February, with the peak expected in March.

* * *

Only during a few sensational years have I seen any mass flowering in February, although in years between, there are colorful spots which afford fine color shots. Rain December 14-15, 1961, was sufficient in a number of places, especially in the High Desert (Yucca Valley to Twentynine Palms) to urge germination. But unless more rain follows, the plants will be dwarfed or give only a very brief display. January rain, if any, should be followed by temperatures warm enough to allow growth, to insure a good show. Abundant bloom requires much sunlight also, for the sun apparently controls the time-clock on bloom even more than does temperature alone.

Most of the seeds require about one inch of rain in one fall storm in order to remove the built-in germination inhibitor so that they can get started in the flower parade. They usually are unresponsive to less than this. If they were not, they could commit race suicide, starting up at several light sprinkles, then wilting and dying before their seeds could mature.

///

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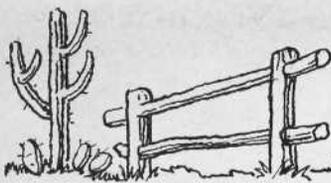
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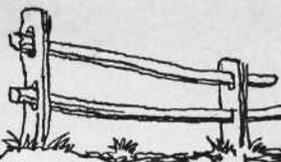
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Continued from preceding page

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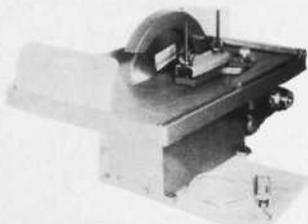
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LETTERS FROM OUR READERS

Trespassers Beware . . .

To the Editor: I am very interested in what J. Wilson McKenney has written in his book, *On the Trail of Pegleg Smith's Lost Gold* (published by *Desert Magazine*, \$1.50), as we own 13 mining claims in the Pegleg area.

While I wish McKenney success with his book, I hope it does not cause swarms of people to trample over our claims. We encountered trouble when the San Bernardino newspaper carried a story of a black nugget found in the Pegleg country last August. There was some destruction to our diggings by so-called lost mine hunters who had read this story, and if it happens again we'll have to take steps to protect our property by prosecuting trespassers who ignore posted signs.

EVA M. RUBOTTOM
Calimesa, Calif.

Escape to the Desert . . .

To the Editor: Your magazine is about as close as it seems possible to get to commercial nothingism. *Desert's* editorial policy is geared to sentimental, naive escapists—with money to spend, of course, for their "back-to-the-good-old-days" yearnings.

What about those of us who would like to see America preserved? *Desert*, naturally, has a vested interest in so-called "American heritage of scenic and recreational resources," but you also have a vested interest in preserving our more important, if intangible and therefore unmarketable, heritages.

Never a word to or about those savages now preparing to arm themselves against their fellowmen in California—those non-city dwellers who expect an invasion from the city in a nuclear war, those same "desert rats" whom you sentimentalize, and those "quaint" traders on history who are now happy enough for invasion from the city.

MARLENE CHAMBERS
Mt. Pleasant, Michigan

Two Fine Presents . . .

To the Editor: My first trip through the Southwest at Christmas time last year was the finest present a man 62 years young could ever hope to have. Your magazine ranks a close second. I'm coming back, the Good Lord willing, with intentions of retirement.

D. S. CALLAHAN
Watska, Ill.

Buzzard Migration . . .

To the Editor: At a little before eight o'clock on a recent morning, a friend and I witnessed a sight that any naturalist would consider a major experience.

Near Saugus, California, a large flock of buzzards were gathered. To say that there were more than 500 is as close as can be

reliably estimated. It took 20 to 30 minutes after we sighted them before the last of the flock gained enough altitude so that we could no longer see them. However, we could see they were headed southeast.

How did such a large number of vultures decide to gather at this particular place for their departure? Since they were in the air so early in the morning, they must have caught the first up-draft that could carry them. This would indicate that the group must have spent the night very close together.

CHESTER HAMMERS
Newhall, Calif.

(According to naturalist Edmund Jaeger, turkey vultures are migratory birds wintering in Mexico. In autumn they assemble in flocks of perhaps 1000 along the desert side of the San Gabriel and San Bernardino mountains and along the Mojave River. Taking advantage of wind currents, they begin to drift toward their winter home. They do not eat while migrating. In the spring, they return in the same formation. Dr. Jaeger comments on this phenomenon in his new book, "Desert Wildlife."—Ed.)

FEBRUARY CALENDAR

Feb. 2-4: Parada del Sol, Scottsdale, Ariz.

Feb. 4: Rodeo, Monte Vista Ranch, Wickenburg, Ariz.

Feb. 9-11: Gold Rush Days, Wickenburg.

Feb. 9-11: Winter Carnival, Reno.

Feb. 10-11: Rodeo, Yuma.

Feb. 11-17: Arizona's 50th Anniversary celebrations, Chandler, Ariz.

Feb. 15-18: Annual Carrot Festival, Holtville, Calif.

Feb. 16-25: National Date Festival, Indio, Calif.

Feb. 17-18: Rodeo, Chandler, Ariz.

Feb. 17-18: Junior Rodeo, Mesa, Ariz.

Feb. 18-25: Annual Cactus Show, Desert Botanical Gardens, Phoenix.

Feb. 22-25: Whiskey Flat Days, Kernville, Calif.

Feb. 22-25: La Fiesta de los Vaqueros, Tucson.

Feb. 22-26: Arabian Horse Show, Scottsdale.



By RANDALL HENDERSON

Late in 1962 or early next year, the gates are scheduled to be closed, and the filling of the great Lake Powell reservoir behind Glen Canyon Dam will begin. Several years' time—depending on rain and snowfall in the upper drainage basin—will be required to fill the lake, which will extend 186 miles upstream in the Colorado River.



While the dam-builders have been blasting rock and pouring cement in the great concrete structure, parties of scientific workers have been engaged in another project, not as spectacular, but nevertheless important. They are the men of the Upper Colorado River Basin Archeological Salvage project. The rather imposing title of their operation needs clarification. Their task,

simply stated, has been to study the geology, biology, ecology and archeology of the great basin which will be submerged in water—so that whatever information is pertinent will not forever be lost to this and future generations of Americans.

The project is sponsored and financed for the most part by the federal government. The salvage program on the south side of Glen Canyon was assigned to the Museum of Northern Arizona—the north side to the University of Utah.

According to Jesse D. Jennings, head of the department of anthropology at the University, director of the project, more than 1100 long-abandoned Indian sites have been located during the five years of study, and many of them excavated. The final reports will fill more than 3500 printed pages.

There were many questions to be answered: Where did the aboriginal dwellers in this desert region come from? What kind of people were they? Why did they choose the recesses in these precipitous canyons for their homes? What did they subsist on? What were their skills? Their customs? Their religion? Why did they leave?

At one site—crude stone and mud rooms under an overhanging cliff—accessible only by hand and toe holes pecked in the precipitous rock face, the primitive occupants appeared to have left hastily. Pottery utensils were on the floor and outside the walls, and two perfect ollas contained dried scraps of mush or gruel—the remnants of a meal that may have been eaten a thousand years ago.

What is the value of this information to present and future generations of Americans? I have asked this question of many anthropologists.

It is because we live in a changing world—a planet on which the evolutionary process is always at work. It is only through knowledge of the past that we can in some measure foresee, and perhaps cope with the problems of the future. According to the historian, Arnold Toynbee, 21 ancient civilizations have vanished from the earth, leaving only the artifacts of their culture as mute evidence of their existence.

Another brilliant scholar has told us that every ideology carries the seeds of its own destruction. We are certain this is true of monarchy and fascism. We would like to believe it is true of communism. But is it also true of democracy founded on the theory that all men are created equal?

The contemporary generation of political aspirants has sought to identify some destructive seeds in our current society. Some of them assure us that organized labor threatens the security of our economy. Others tell us the danger is in a capitalistic system which seems to put a premium on selfishness. Some would isolate the United States from the rest of the world — they see dangerous seeds in foreign entanglements and aid to the have-not peoples. Others say we are too prosperous—that affluence has made us arrogant. Nearly anyone can give a superficial answer.

I do not pretend to know the answers. But I am glad the historians are delving into the past, and the archeologists and anthropologists are giving us a clearer picture of the slow and blundering steps by which our ancestors have been ascending the ladder of evolution. A knowledge of the past may help us cull out the destructive seeds that threaten our future.

* * *

One of the Christmas cards I received this year seemed especially appropriate at a time when there is so much distrust among fellow-Americans—when the term “communist” is being hurled as an epithet at the liberals of the left, and “fascist” at radicals of the right. The Christmas greeting carried a quotation from Judge Learned Hand, who wrote:

“Risk for risk, for myself I would rather take my chances that some traitors would escape detection than spread abroad a spirit of general suspicion and distrust, which accepts rumor and gossip in place of undismayed and unintimidated inquiry . . . The mutual confidence on which all else depends can be maintained only by an open mind and a brave reliance upon free discussion.”



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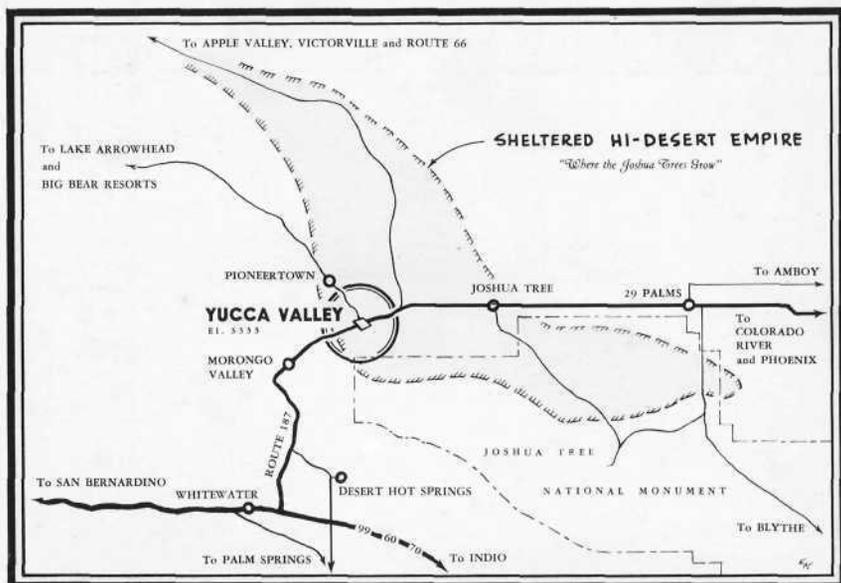
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