LOST GOLD:
Pegleg’s
Breyfogle’s

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Cover
The ubiquitous and talented David Muench captured Spring on the desert with his scene of Torny yucca in bloom, set against the Sierra del Carmens in Texas's Big Bend National Park.
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LETTERS

“INCISED” STONES
Re “Cave Paintings of Baja” in your April ’80 issue, I was especially interested in the pictographs depicting triangular motifs. I’ve collected what I call “incised” stones for many years here in southern Nevada and the triangular motif dominates 80 percent of those I’ve found.

The problem has been, who were these people and where did they go? The Paiutes did not know them, or so they say; no stones are found in pueblo or basketmaker burials; yet, they no doubt were here a long time judging from the many camps found throughout southern Nevada producing the stones.

“Incised” stones have been found throughout North America, even as far away as Alaska; however, only the stones from southern Nevada possess the characteristics of your Baja cave pictographs. And noted archeologists I’ve consulted can come up with no answers.

I’ve theorized that these people came up the Colorado River, from where I don’t know, and probably as much as 2,000 years ago. Most all camps produce a very old grade of black cooking ware with no motifs or distinguishing marks. Nor are projectile points diagnostic to any known here in the Great Basin.

A friend, Milt Blake, recovered a beautiful specimen (“incised”) near the Big Sandy River in Arizona which convinces me they did a lot of traveling. I am sending a few pictures and if anyone can shed any light on the mystery, I’d greatly appreciate it.

Raoul M. Dixon
Las Vegas, Nevada

SANTANA OR SANTA ANA?
C. William Harrison’s interesting and factual article “Beware the Devil’s Wind” refers to this wind as a “Santana” or (quote) “… incorrectly but equally as a Santa Ana.” Enclosed is a copy of a clipping from the Los Angeles Times, written around 1962, in which C. W. Kalstrum, then chief forecaster for the U.S. Weather Bureau, identifies the wind as “Santa Ana” and indicates that is the correct name and that his office will continue to use it.

Henry J. James
San Clemente, Calif.

We at Desert, lacking total faith in the opinions of the U.S. Weather Bureau, took this question to Dr. George Fischbeck, the affable weathercaster for KABC TV News in Los Angeles. Dr. George calls it a “tempest in a teapot.” He told us that the city of Santa Ana was indeed tired of being blamed for the Devil’s Wind and may be responsible for the large-scale public relations effort behind Santana. However, Dr. George thinks Santana is really a “corruption by Iowans” and notes that Webster’s calls it Santa Ana because the wind, around Los Angeles at least, originates in the Santa Ana Mountains. Being in the word business, we are inclined to go with Webster’s.

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A Weighty Decision

by Don MacDonald

As this is written, copies of the Bureau of Land Management’s 436-page draft of the “California Desert Conservation Area Plan Alternatives and Environmental Impact Statement” are arriving in the mail of concerned members of the press, government, and public.

I can’t speak for other recipients but we at Desert, being in the word business ourselves, reacted with awe when ours was delivered. It weighed in at 5 lbs., 4 oz. and measured 11 by 14 ins. We don’t know what it cost to mail because BLM, enjoying government franking privileges, doesn’t need to lick stamps like the rest of us.

We do know that someday we must study this tome in all of its detail but meanwhile, we’ve been reassured that the draft does not propose a course of action. It attempted to throw out a seemingly endless choice of options and arrive at four basic alternatives. Specifically, these are one which favors intensive economic use, one which favors conservation, then a “balanced” alternative and finally, no action at all.

Reminding ourselves that the Plan involves only a 10-1/2-million-acre chunk of land called the California Desert Conservation Area and not the entire Southwest, we accept BLM’s lament that it had to contend with extreme views from diverse groups as well as with the thinking of middle-of-the-roaders. After all, some 12 million people live on the western edge of the CDCA and a significant number of these individuals consider this vast expanse of public land to be their playground. So, too, do those who come from elsewhere to visit.

There lies the real issue, one that extends far beyond the boundaries of CDCA to public lands everywhere. On the one extreme are those who argue that if it’s indeed our government, why then are not its lands our lands for each of us to enjoy as we individually wish. At the other are those who favor management in trust which in reality means closure of most of it to most of us.

I have mixed feelings. I drive on C-78 by Anza-Borrego and can feel and see the havoc wrought by the swarms of bikes and buggies scurrying aimlessly over the scarred terrain. Then when I take the San Marcos Pass route, C-154, past Lake Cachuma, I’m offended by the countless signs sprouting every 50 feet or so along the highway telling me it’s against the law to enter, park or even pause.

Am I alone in thinking that either extreme is unacceptable? Am I to hang up my pack and stay home when I reach an age at which it is no longer wise to venture on foot into the wilderness? Must I continue to suffer elected and appointed authorities who assume I’ll mangle flora and harass fauna wherever I venture? Am I anti-social in resenting not one but three rangers separately checking my permit on one three-mile stretch of trail? Is it deprived to toy just for a moment with the thought of opening that forest service gate, locked for no reason other than their convenience, with a pair of bolt-cutters? Are the government’s ubiquitous signs more or less offensive than empty beer cans?

It is for these reasons that I favor the fourth alternative proposed by BLM; namely, no action at all. Give the private sector, ranging from the National Association of Four-Wheel-Drive Clubs to the Sierra Club, a chance to thrash out opposing views, to find middle ground, and to create a self-policed mandate that excludes no one person or group. We need less government, not more government, particularly 20 miles from nowhere.

BLM’s yet-to-be written Plan was mandated by the same legislation that created the CDCA. It will undoubtedly serve as a model for other conservation areas. And what we have before us are four alternatives of which any one could be come a reality in the final draft.

Your input is invited by September 1st. If you are like me, you may first favor the “balanced” alternative. But think a moment. Regulations must be created to enforce this balance. Do we need more of these, or more signs, more patrols, more locked gates? I for one don’t wish to risk being cited for jaywalking in the middle of the desert. So, maybe no action at all will give us a breather, a chance to get government out of this act, a chance to protect our fundamental right to get away from it all, each in a way that is compatible to his brother’s, without Big Brother directing traffic.
TALL HOUSE

Essay and Photographs by Betty Tucker-Bryan

WUPATKI. THIS HOPI WORD sings of mystery, of antiquity, of long ago. The ruin, undiscovered by thousands of tourists yet only 60 miles from the Desert View entrance to Grand Canyon, is in Wupatki National Monument quietly awaiting the discriminating visitor.

The village of Wupatki (above) once contained over 100 rooms, housing between 250 and 300 Sinagua Indians. The village's amphitheater is in the foreground.
UPATKI, MEANING 'Tall House', is a ghost town of A.D. 1210. It was once a thriving pueblo of Indians who farmed the porous volcanic ash spewed out by what is now called Sunset Crater.

In 1066 A.D. the few scattered Indians who maintained a meager existence by farming the worn volcanic fields of the San Francisco Peaks were startled by a violent eruption. The ground had been trembling for days, making everyone nervous and worried. Then, off in the distance, they saw a tall red flare shooting into the sky. As it continued rising higher, lowering, and then spurting upward again, the sky darkened and filled with ash. A strong wind carried this ash for many days' journey toward the Little Colorado River. Slowly the ground stopped shaking. The place where the earth got mad was humped up like a head basket. Fire like thickened red blood ran down its sides.

Sometime later, word came that the earth's madness had renewed the lands. The thin layer of ash acted as a moisture-retaining mulch while the cinder cover held in the moisture. Farming was good. The Indian people began their move to this new place.

From all directions they came. The Hohokam from the south, the Mogollon from the southeast, and the Anasazi from the north. And with them they brought their ways of life and their cultures.

A small group from the south known as Sinagua (sin meaning without, agua meaning water) ironically located a good spring. The ground looked good for farming and so it was here they decided to settle.

A crop had first to be planted. The men, women and children worked steadily, punching holes into the volcanic soil with digging sticks. Into each hole they dropped seeds. They planted squash, corn, beans, and cotton.

As soon as the crop was in they began building their home. There was an abundance of material for this. Once an ancient sea had covered this area and in time the silt from this sea turned into what is now known as Moenkopi sandstone. This rock split easily along horizontal planes, making it convenient to use for building. The material was laved evenly and held securely with a fill of mud and small stones. The rooms were usually small with low doorways that could be covered over during the cold winter months. Some inside rooms were plastered over with more mud. Ventilators were built in by leaving a hole at floor level. From this they put a stone-lined channel to direct the air flow. At the end of the channel was an upright slab placed so the draft stayed away from the fire pit and the cooking area. In some of the food preparation rooms were small storage bins that held a supply of corn where it would be handy for daily use, much as our cupboards of today are used and in anticipation of crops to come, the Sinagua built many large storage rooms and pits.

To make meal, dried corn was ground on a flat stone called a metate. The grinding stone was held in the hand and called a mano. The cooking rooms had several different metates that would produce meals from coarse to very fine.

About the same time corn was ripe, beans were picked. The dried pods were laved out on woven mats and the young girls flayed them with seed beaters made of sticks tied together. They kept this up until the beans were all freed. Then the beans were placed in a winnowing basket and tossed into the air, letting the wind blow the chaff away.

Wild grama grasses were dried and...
beaten in much the same way. Later they would be sprouted and chewed by the woman of the house. She would then spit the mess into a bowl. This mixture of starch and saliva produced a sure, if not appetizing, sugar supply.

Cactus fruits were gathered. They, along with the dried squash, were prized for their sweetness. Once dry, they could be ground on the metate and mixed with other foods to form cakes, or stirred into a pot of beans. And when the pinyon seeds were ripe the entire family went up into the forest. Mats were placed under the trees and the cones were shaken and knocked from the limbs. These cones were then roasted until they popped open, releasing the little brown seeds.

During the summer months the women wore loom-woven cotton skirts. Their sandals were of twilled twine. Many of the older women kept their hair cropped short, mainly because they used it for designs in their crafts. While the women were not very picky about how they looked, the men spent hours adorning themselves. "Hair long and tied it in pigtails about how they looked, the men spent hours adorning themselves. Their loin cloths resembled a shirt of the neighboring Hopi and were eagerly met. Soon the Sinagua began to wear their own parrots and macaws.

For the people of Wupatki were superb craftsmen. The women would sit in the outdoor work areas, protected from the wind by the side walls of the pueblo and from the sun by a ramada of juniper branches. Here they would gossip as their hands flew at creating. Using the yucca needle for an awl and nearby desert plants for the warp and weft, she wove her story. The center of the basket represented the beginning of life. Then there were black clouds as the rain came. But soon the sun would come and so she added red to the design. The outer part of the basket was the increase of the people. And so the stories went.

But life wasn't all work. They had a lot of fun too. For one thing they had built a huge amphitheater. In many ways it resembled a kiva of the neighboring Anasazi but it was never roofed over as a kiva should be. Here they held their ceremonial dances. It was then that they dressed in their finest finery of jewelry and feathers. They twined shells into their corded belts and wore their most elaborate skirts. A great fire was built in the center of the amphitheater. Then the Indians lined the walls, watching the masked dancers as they appeared to be beating to the beat of many drums.

And almost everyday the men found time to gamble. For this game they had dice baskets that were round and rather low. They used several elaborate dice carved of bone. The players tossed the dice from the basket, letting them drop into it again. Points were scored and stakes paid according to how they landed.

The Wupatki had a ball court similar to those seen by the Spanish conquerors when they invaded Mexico. Though carefully built of sandstone rather than the more common adobe, the dimensions are quite similar to those still used at the time of the Spanish conquest. The court was not round, but rather in the shape of a football with vee-shaped entry doors at either end.

It has been suggested that this court was used for ceremonial ball games in conjunction with religious rites, but could these rites have been any more ritualistic than our very own World Series? Whatever, the Sinagua courts had a built-in air conditioner, a blowhole. In this area there are faults and occasionally the resulting earthquakes have small openings to the surface. These openings, known as blowholes, alternately take in and discharge air in response to surface temperature and pressure change, expelling cool air even in the summer.

So the Sinagua had their work and their games but just like today, they also had their sorrows. Many babies and children died. The old people suffered terribly from arthritis, especially in the winter. Their teeth were ruined at an early age from chewing tiny pieces of rock mixed in the meal that had been ground on the stone mortars. Diseases were brought in regularly, along with the trade goods.

Then, in an all-too-brief 90 years, the wonderful soil sent down from the volcano was slowly blown away by the ever strong wind. Reddish-brown hardpan refused digging sticks and seeds. The rain ceased. The springs dried. The people began to dry. There were over 250 people living here and the land could no longer support them. Slowly the Sinaguans packed their most precious belongings, said a sad farewell to their dead, and departed with many a backward glance at this home they had so carefully built and loved. Some moved on to other lands in the Verde Valley to the south while others waved goodbye and headed east to Chavez Pass near what is now Winslow, Arizona.

**ES THEY'RE GONE but you can go and see how it must have been. Over 800 sites have been located and several of these ruins have been excavated and restored. Most can be easily visited. Among them are Wukoki, Citadel and Nalakibi, and Lomaki. The best way to see this area is to go north of Flagstaff, Arizona on U.S. 89. Turn off at the Sunset Crater National Monument. There is an excellent campground near the visitor center. Next morning drive the 14 miles through beautiful, changing scenery to Wupatki National Monument. There is a visitor center and self-guiding trails but no camping.**
Salt Spring

May each step you take over her old trails be always haunted by Breyfogle's lost gold and the Mexicans' hidden treasure.

Old rock fort at Salt Spring was built for protection against raiding Paiutes. A dozen men lost their lives here.

Story and Photographs by Sally Lindman

Once and a while a brave off-roader or two will stumble on to the old ghost camp and Salt Spring, both hidden beyond Dumont Dunes, Calif., and if the shifting sands are just right and remnants of the old Mexican trails are visible, curiosity may tempt the visitor to stay for a bit.

Precious gold dust was gleaned from the sand of the Amargosa River at Salt Creek, 29 miles north of Baker, Calif., as far back as 1830, maybe even earlier, and those miners who were driven away, time after time, by angry Indians left plenty of proof.

Some will scoff at the possibility of the abandoned camp on the edge of Death Valley even existing, particularly when they've probably passed right by it while travelling C-127, because Salt Spring and the old rock ruins are hemmed in by secluding granite and narrow rocky canyons, and not more than five city blocks from the paved highway!

Salt Spring and the ghost camp she guards have witnessed many a human disaster and whenever there is violence, you can suspect the presence of fast-stashed valuables. If it wasn't Indians versus Mexican miners, it was parched stragglers from water-hungry wagon trains, or horse thieves and military patrols, freighters and fur trappers. All these harsh pioneer roles were played throughout the rugged environs of Salt Spring and her ghostly mining camp.

No one, for example, has found the location of the Mexicans' hiding place containing both gold dust and the hardrock gold crushed by arrastra. And there were the wagon cast-offs that are today's antiques and relics, both from the Wade party and the Jefferson Hunt party. Locating the temporary Indian camps might also reveal collectables and arrowheads.

Fremont, Carson, and Godey were camped at Salt Spring in April, 1844, and it was Fremont who described it as "a very poor camping ground; a swampy, salt spot, with a little long, unwholesome grass; and the water which rose in the springs useful only to wet the mouth but entirely too salty to drink."

Salt Spring is located in the canyon of the south branch of the Amargosa River. This canyon forms a pass between the Kingston Range and the Arawatz Mountains and according to Springs of California published by the U.S. Department of the Interior in 1915: "Desert travel has been mainly north of that pass, through the canyon of the main branch of the river."

Knowing original routes of travel can often lead the searcher to stashed gold or coins. The old California Trail of the 1840s entered the state from Pahrump, Nev., with a stop at Resting Springs where there was water. Next came Tecopa and then the descent into the valley of the Amargosa River to its big bend at the southern end of Death Valley. Close to this bend is the oasis of Salt Spring.

Capt. Jefferson Hunt's caravan of March, 1849, halted at Salt Spring to check their equipment and a few members of the group prospected, finding gold-bearing rock on the hill beside the little pond. Sheldon Stoddard, a Mormon member of Hunt's party, is credited with this discovery. Moving on to China Ranch, Stoddard shared his discovery with a Col. Williams, who soon set Stoddard up with a pack train and men to work the mine, utilizing arrastras that were already there. Were these arrastras left by earlier Mexican miners? If not, where did they come from? And now the Amargosa gold rush begins. Salt Spring gold samples taken by Hunt's party were displayed in Los Angeles during January of 1850 and several men made plans to return to "Mormon Diggins" (as it was then christened) to start mining. Some writers of the day also referred to the remote area as "Lost Mormon Diggins," but no one had really lost the place.

A Mr. Roan was the first to work and actually "own" Salt Spring according to Andrew Sublette, the famed fur trapper who was foreman of the mine in the 1850s. Come 1851, the Los Angeles Mining Co. went to work. Rich ore was found, but the place was just too far away. Then the Desert Mining Co. attempted operation, only to fold because of freighting costs. Next, the Salt Spring Mining Co. stumbled to failure. People and gold companies were coming and going on almost an annual basis!

Adrian Egbert of Daggett, Calif., in the 1890s met an aged Mexican in Los Angeles who told of having taken "plenty gold" from the Amargosa in 1855 until the Indians forced them out. Egbert and friends then went to the mine and set up a five-stamp mill themselves.
Spring. He is surprised to see the remains of Beale's west-bound expedition halt at Salt Springs. He is quickly surprised to see the remains of houses and arrastras where "a fortune had been sunk by men sufficiently deluded or sanguine to abandon the rich mines of California, travel 150 miles of desert, and live upwards of 12 months in a spot so desolate and forlorn that there is not enough vegetation to keep a goat from starvation." The mules of Beale's caravan refused to drink from the sulphurous spring.

Then about 10 Mexican miners arrived at the Amargosa Mines in March, 1861, and activated operations. Soon after, the Indians raided them, taking nearly all their provisions. The Paiutes had been watching the mining camp for several days from their own temporary settlement at Sheep Springs. The Civil War was in full blossom and though one Mexican miner safely made it to an Army post at Marl Spring, 45 miles south, for help, the help arrived too late and six dead Mexicans were buried somewhere at Salt Spring.

Some of the adobe houses, including the present rock ruin atop the hill, were built in 1862 by the partnership of McFadden, Stuart, and Bennett. They were continually threatened by the Paiutes, so a rock fort was fashioned and stocked with a barrel of water. Another barrel of water was positioned in the longest tunnel, where a guard stood day and night.

This time an ambush attack by the Indians left five miners dead, their bodies riddled with bullets. Where the Indians got their guns was anybody's guess. Survivors quietly hid in the tunnel until nightfall, then hurriedly made tracks for Mojave, where an armed posse was organized to bury the victims. These five graves and others were reported visible until 1900 but there seems to be no trace of them today.

A NOTHER CONTEMPORARY record states: "These mines were discovered in 1856 and re-located in 1863. Veins are narrow but rich in gold. Gold is found in pockets, one from which $11,000 was taken."

 occurs the gold is there all right, and so were the Mexicans and so were the Indians. What could a person find if they were to locate the Paiute's old camp? Legends aren't always dependable and cut over the stack, vast and silent reaches of the Mojave Desert, fact and fiction may turn out to have blended as easily as Kool-Aid to water, but you can't turn your back on authentic historical facts, especially if you enjoy hunting treasure.

A mill was built between 1862 and 1863. Ore trials were depressing and the mill was put in charge of two men. The Paiutes didn't take long beating out another warpath to the place, where they burned the new mill and killed the men. Fremont returned to Salt Spring in December, 1864, only to view the destruction delivered to the camp by the hostile Indians. Eight weeks prior to his arrival, three more men guarding the property were slain.

The mid-1860s finally saw successful mining at Salt Spring, accomplished under the direction of Superintendent George Rose, and then Anton Breyfogle set fire to a blazing dream of instant wealth with his "Lost Breyfogle Gold Mine."

There were some old-timers, and qualified men at that, who felt sure that the Amargosa ore was none other than Breyfogle's rose-plume quartz. Breyfogle had spent an afternoon and evening at the Amargosa, poking around all over the property. Rose devoutly maintained throughout his entire life that samples Breyfogle carried had only come from the Amargosa. He felt that the eventually deranged man probably hadn't even remembered where they'd come from himself, after his ordeal with the desert. Rose wasn't the only one who seemed to positively recognize the ore. Frank Denning (now deceased) saw the Breyfogle samples and swore that it was Amargosa high-grade. Now those are a few opinions on one side of the fence. However, did you ever notice that rock occurrences, geologically, have a tendency to crop up, sometimes even many miles away, composed of exactly the same stuff? That rose-pink ore with its occasional brown deposits is just as likely still sitting out there on that darned old desert, just waiting to be found. And that's what I believe will still happen.

A ALL OF US KNOW that the desert can be both kind and cruel. It is an area that is always unpredictable because even a slight wind shifts and shifts the hills and piles of glistening sand. Your road to the mines from the highway must be individually chosen. Do not attempt driving to anywhere except Salt Spring itself without walking or scouting ahead on the trail (what you can find of it) to the ruins. There are many tunnels and mines at the Amargosa camp and in one of them, only 30 feet from the surface, hot water boils noisily below the ground. Great columns of steam have been seen coming from the chasm on wintry days. You'll see innumerable ruins of foundations, and footpaths lead every which way over the mountains. Walk them. Take time to wander where the Mexicans would have stashed their gleanings of gold.

**Gravity holds Salt Spring structures together.**

The tunnels are all deceiving. At first approach they are solid and clean cut, then you find that one more step could have sent you into a bottomless pit. Would that the old oven on the east bank of the hillside could talk. This is hard to see if you are unaware of its presence, for the oven blends into the terrain very well.

Gold fever hit at Salt Spring again in the 1880s and expensive machinery was brought in for the recovery of much gold. Then in 1902, the new owner of the Salt Spring Mine, J. B. Osborn of Daggett, hit a pocket of high-grade netting him $60,000 in one week. Then the Tonopah and Tidewater Railroad came along, to flourish for a while and bring people. And where there were people, there are people relics. Jack Moore of Los Angeles owned the mine in 1950 and in 1960, a group of men once again were diligently at work in the old tunnels.

Y OUR FIRST glimpse of historic Salt Spring will be just east of Highway 127. The spring is over-flowing and guarded by two giant mesquite trees, thick and green, and always looking totally out of place against the dry, scorched appearance of the surrounding desert and crusty white alkali. On foot, you can follow a narrow trail (northwest) a short distance where you discover a very early rock-house ruin, nestled in to the natural deep gorge of the ancient Amargosa channel. The Mexican miners may have resided here. To the south sits Shoshone Lake, all dry and skirted with the sites of ancient Indian camps. East of that and a little north are more adobe ruins. North of Salt Spring lie the beautiful Dumont Sand Dunes. And to the west & the rugged Amargosa Range. Amethyst crystals and geodes are found up and down nearby Kingston Wash.

It is said that the Devil controls the Amargosa River. He causes it to flow underground. Only at infrequent intervals does the bed of the river rise above the surface, and of this beware, especially in stormy weather. Enjoy Salt Spring and may each stop you take over her old trails be haunted by Breyfogle's lost gold and the Mexicans' hidden treasure.
Land of the Bristlecone Pine

By Kirk Pocan

Among California’s scenic highways, there is probably none more inspired than the stretch of U.S. 395 that straddles the Owens Valley between the White Mountains and the eastern Sierra Nevada escarpment. And what’s more, it leads one to Big Pine where it intersects with Westgard Pass Road (C-168), gateway to the forest of the ancient bristlecone pines.

As your vehicle wheezes up the “pass” to its 9,000-foot peak and its meeting with White Mountain Road, which in turn leads to the pre-biblical forest, stop and look out at the panorama of life zones that unfold below you.

Pinon and limber pines intersperse randomly with desert bush work at the perimeters of the sagebrush belt. Aspen trees frequent the borders of small streams. Wild flowers provide occasional variation with subtle plummage in the western foothills and provide occasional variation with subtle alpine forests well below the barren alpine environment. On the eastern side of the valley, dry grasslands merge with gentle foothills and highland slopes with wild roses, white fox, and cockleberrys colorfully illuminating an otherwise achromatic environment. Each belt of topography, showing nearly every transition imaginable, may be seen as your vehicle wheezes up the pass to its 9,000-foot peak and its meeting with White Mountain Road, which will take you to the Bristlecone Pine Forest 11 miles ahead. Beyond the stand of bristlecone pines, White Mountain Road twists and winds for 20 ungraded miles, to eventually terminate on the summit of lofty White Mountain Peak.

Traveling on White Mountain Road, you'll traverse mountain highlands which host scattered pinon, limber, and juniper trees surrounded by stands of desert chaparral. The spell of the White Mountains is a spectacle panorama of the Sierra Nevada. Bristlecone Forest, where there is a spec-

The age of the bristlecone pine trees in this lofty desert remained unknown until the late 1950s when Edward Schulman, an associate professor of dendrochronology at the University of Arizona, first investigated the Bristlecone Pine Forest in the White Mountains. Schulman conducted age-dating studies on over 1,000 trees in the area. More than a dozen trees were aged at 4,000 years. Eventually, a 4,600 plus year-old specimen was aged, the oldest living thing. Prior to Schulman’s studies, it was believed that the giant sequoias of California represented the oldest life on earth. Some of those trees had been dated at 3,500 years. Now it is known that the oldest bristlecone pine, many hundreds of times smaller than the giant sequoias, surpasses them in age by many centuries. A separate area, Patriarch Grove, cut deeper into the crumbling forest, contains clusters of bristlecones. A multi-trunked specimen known as The Patriarch measures nearly 40 feet in diameter, the largest bristlecone pine yet discovered. In its youth, the tree sprouted multiple stems, as do many of the trees. Typically, many of these multiple stems are abandoned as the tree responds to the scarcity and brutality of a harsh highland environment. The tree may nourish only a single stem for many hundreds of years, perhaps thousands, sacrificing portions of its anatomy to survive, but a trickle of life persists. The Patriarch, however, has flourished and each stem has grown to maturity, possibly due to its favorable position on level ground. Although far more flamboyant than its neighboring group of bristlecone pines (right) overlook a shallow basin just below their beery regime, their sculptured limbs pushing skyward after literally thousands of years of weathering.
brothers, the Patriarch is but a mere child of 1,500 years. Still, the tree is not entirely free of the scarring that seems to predominate in this desolate forest. The crown culminates in a series of dead, naked, twisting limbs, only 30 feet high, as though its healthy trunk had somehow been stunted by forces unknown.

Unlike most conifers which flourish in acidic soil, the bristlecone pine thrives in an alkaline soil of crumbled dolomite. Roots commonly occur within two feet of the ground surface. Neighboring areas harbor sagebrush and related desert-type bush flora growing in richer, sandstone soil, which represents a competitive interplay too fierce for the bristlecones. Conversely, few other plants are able to sustain growth in the light-colored dolomite soil which is home for the trees.

Fire danger, fortunately, is minimal, since the trees are spaced far apart with little ground cover between. Lack of oxygen at this lofty elevation also reduces the danger of fire. Furthermore, Edward Schulman has postulated that the thick resinous sap produced by the trees protects them from sustained or severe insect damage, as well as damage from molds and fungus. Bristlecone wood cells are dense, extremely resinous, and highly durable. And, too, bristlecone needles persist for an average of 10 years, some for greater than 30, before regeneration occurs. By comparison, nearby limber pines shed their needles every three to four years.

These defense mechanisms are needed. The area above 10,000 feet receives only 12 inches of annual rainfall, two inches in excess of the qualifications for a true desert, and thus the growth season rarely exceeds six weeks. Even so, as late as Memorial Day, snow three to four feet deep can be found in drifts along hillsides and shallow ravines.

The most aged trees of Methusaleh Walk, another marked trail to the bristlecone area, are situated at the very limit of the dry forest edge, where calcareous rock outcroppings and minimal rainfall predominate. In this highland wilderness, the trees seem to thrive on hardship. Sustained periods of growth may result in the addition of no more than one inch of new girth over an entire century. During adverse periods, the trees sacrifice segments of trunk and limb, while a minimal portion of the tree keeps it alive. Deadwood will accumulate in other major portions of the tree, resulting in layering of wood in varying stages of growth and decay.

Moving through this timeless land of antiquity, you'll feel a sense of displacement, as if you were traversing the primal beginnings of some archaic culture. Indeed, many of the trees here rival the origins of civilization in age. You'll observe scores of contorted, dwarfed trees nestled into rocky arid soil, occasionally clinging to broken limestone or ascending from eroded ravines. Their limbs and gnarled stumps reveal scoured grain patterns after literally thousands of years of weathering. At least nine trees in Methusaleh Walk have been found to be greater than 4,000 years of age. The trees seem to be enduring a continuous, violent struggle, frozen in time, battling a brutal environment which renders trunks and crowns misshapen and crippled.

The bristlecone pine registers weather patterns over the course of its life by the relative widths of annual rings. A recorded period of world-wide drought in the 12th Century, for example, corresponds with narrow ring patterns within the trees at that selected interval. Likewise, long wet periods correspond with wider rings, indicating maximum growth periods.

Moving further along Methusaleh Walk, you'll encounter the bristlecone pine known as Methusaleh, the oldest known living thing. This ancient tree has survived for greater than 4,600 years. Examining the tree reveals layers of growth of varying age; a bark covered segment provides living tissue rising from the trunk, other layers are either dead or dying. Inspection of the timeless warrior, the image of a tiny seedling burrowing into primal soil and sprouting life thousands of years in the past, before civilized man, is humbling. A human life is but a mere whisper in this cradle of longevity. This elder pine suggests the final rewards of perseverance in the face of adversity.
At least nine trees have been found to be greater than 4000 years of age

Astonishingly, the older pines are still able to produce cones on occasion, as they have for thousands of years. The trees first bear cones at 20 years of age, shedding seeds in late September and early October. The cones are covered with bristle-tipped scales, for which the species is named.

Even though many of the trees in the Bristlecone Pine Forest have been aged at 4,000 years or more, deadwood lying about in the area has been dated at 8,200 years, suggesting that even older trees existed there at one time. Even specimens of local sagebrush exceed 220 years in age, far greater than their normal average life span. Schulman himself wondered about the property of California soils which allow such aged specimens, not only in Bristlecone Forest, but also the northern redwoods and southern sequoias.

Bristlecone pines are not eloquent, faultless specimens. They are sculptured relics from the heart of nature's mystique. The facade of broken, twisted crowns and gnarled stumps reveal great strength supported by a foundation of powerful mystery. Hidden within the girth of the bristlecone pine lie forces of survival unmatched by any living species, perhaps by any species throughout all of time.

You'll want to return again to this tiny forest of ancient, ghostly trees nestled deep within the western slopes of the White Mountains but there will be no hurry. The trees have time, lots of time. 

Even the most aged bristlecone will produce small, spiny cones (above). Photo by Englis

Even the most aged bristlecone will produce small, spiny cones (above).
Early in 1965 an anonymous writer sent an article to Desert Magazine stating that he had, during the past ten years, collected $314,660 in black gold nuggets in an area "within 30 miles of the Salton Sea." This article, which was published in March of that year, was followed by other letters answering questions from readers, each accompanied by at least one of the writer's nuggets in order to authenticate his correspondence. All of his letters were signed "From the Man Who Found Pegleg's Black Gold" and each was mailed from a different location. With some letters he sent photographs. The letters were also published in the magazine between 1965 and 1968, and the nuggets he sent were displayed in Desert's office for readers to examine. Because the Pegleg Black Gold legend is as important to the lore of the Southern California desert as the Lost Dutchman Mine in the Superstitions is to Arizona, proof that the black gold actually existed and was still to be found made a substantial impact upon modern desert history. To recap and update this fascinating story, Desert Magazine's present editor, Don MacDonald, arranged to interview former editor-owner Choral Pepper who was the recipient of the modern Pegleg letters and nuggets in the 1960s.
Dear Choral Pepper,

Although the enclosed story has no byline, I believe it and the photographs will be of interest to you. After you have read the story you will understand why the reasons for my remaining anonymous are too obvious to enumerate.

You have my full permission to publish the story and this letter if you wish. They may be of minor interest to the readers of Desert magazine.

More important, I am also enclosing two of the Pegleg nuggets. One is still black, exactly as found and the other has had the black copper oxides removed by the process mentioned in the story and is now native "gold" in color. You will have these nuggets to show one and all who have doubted the story of Pegleg's black nuggets. You may keep them with my compliments for Desert magazine's collection of desert artifacts—in this case you can start a new collection of items from lost mines that have been found.

Very sincerely yours,

The man who found Pegleg's black gold

P.S. If the story is printed, undoubtedly there will be some questions from the readers. As mentioned, I'm a subscriber to Desert magazine, and although I will remain anonymous, I will answer any question or letter that is printed in Desert magazine.

MacDonald: I'm glad you've moved back to the desert, Choral, especially with gold bouncing between $600 and $800 an ounce and at least three readers every day asking what happened to the Pegleg gold you used to display in the office here in Palm Desert.

Pepper: Well, Don, I'm wondering about it too. I always felt that the nuggets sent as proof by the man who claimed to have found the Pegleg black gold belonged in trust to the magazine and its readers, rather than to me personally. When I sold the magazine, I included them in the inventory. Ten nuggets, one weighing two ounces and the others around an ounce, arrived while I was editor and I understand that one or two more were received after I sold Desert.

MacDonald: Let's see—they'd be worth something like $6,600 today, wouldn't they? I've been told that the first nuggets you received from the man who found them set off a gold rush to the desert.

Pepper: It was unbelievable. Our office was so crowded on weekends with Pegleg black gold seekers that we had to line them up outside. We were threatened by nuts who thought we knew the modern Mr Pegleg's identity. We were accused of fostering a myth to increase circulation. We were cajoled by mystics who wanted to borrow them to get psychic impressions. Pendulum swingers believed they could detect the source by magic. Collectors offered us enormous sums. Television producers sought us for interviews and adventure features. The excitement carried on for an entire year.

MacDonald: What's the real Pegleg story? When did it all begin? Pepper: Unless you've had reason to research it in depth, as I did after we received the black nuggets, you'd probably settle for the legend about a John O. Smith, horsetrader and trapper known as "Pegleg" because of his wooden leg, who found some black gold nuggets in 1852 while traveling from Yuma to Los Angeles via Warner's ranch. Somewhere in that desolate region he climbed one of a series of three hills to get his bearings. On its top lay a quantity of black lumps that Smith assumed were copper due to their heavy weight. He picked up a few and carried them with him to Los Angeles. While exhibiting them in a bar there, he let a miner examine them. The miner scraped away the black desert varnish and revealed the gold.

Pegleg Smith immediately drummed up a grubstake and set out to relocate the hill with the nuggets but he perished on the desert. In the years that followed, other attempts to find the bonanza also ended in tragedy. After the Civil War, veterans with peglegs were almost as common as men named Smith, and at least two other Pegleg Smiths came upon black-coated gold in the southwest desert. Both produced reliable witnesses to vouch for the authenticity of their gold and both met tragic deaths before cashing in on their finds.

I, personally, could never get involved in the historic Pegleg Smith hassle. Whichever legend you buy, some passionate believer of another Pegleg Smith story will accuse you of being misinformed. I noticed a letter from one of them in your April 1980 issue. The only
Pegleg legend: I subscribe to is the modern one. I know he found black-coated gold. I saw it, held it, had it assayed. Our man identified it as coming from an area within a map published in an early issue of Desert Magazine, which we reprinted with his first letter in March, 1965. Whether or not this is the same area as hazily recollected by any or all of the 19th century Peglegs is irrelevant.

MacDonald: How did the modern Pegleg happen upon the gold? Was he a prospector?

Pepper: No way. He simply was a nature lover camping in the desert to enjoy the spring wild flowers. After hiking a few miles over uneven terrain, he stopped to rest. The small hill he sat upon was covered with a crust of smooth, water-worn pebbles, the sand having been partly blown away by wind. This is typical of deserts in the southwest. Some are mosaicked for miles with the black-coated stones worn smooth by a combination of sand action, flash floods, and ancient seas that once covered the desert. We call the black coating “desert varnish.”

Our modern Mr. Pegleg sat there awhile flipping pebbles down the side of the slope. When he seemed unusually heavy, he examined it. Black, rounded on the edges and about three-quarters of an inch in diameter, it felt suspiciously heavy for its size. He scratched away the black surface with a pen knife. It shone bright gold underneath. As a long-time Desert Magazine reader, he was familiar with the legends of the Southwest. He knew immediately that he had found the legendary Pegleg black gold.

MacDonald: Why didn't he stake a claim?

Pepper: He had learned from the Pegleg legends not to rush off half-cocked to brag about his find and end up unable to relocate it. Instead, he hung around for two hours or so to gather up seven more nuggets when he gave us his story. At today’s rates, that would be worth up to $7 million. Because he was (he stated) out of sympathy with certain recipients of our tax dollars, he didn’t wish to share the loot with the IRS, so he kept the site a secret and didn’t stake a claim. He did say that if there were any way he could contribute to a cause that served people without government interference, he would divulge the location so it could be exploited. None of our readers was able to meet his challenge.

MacDonald: What makes the nuggets black?

Pepper: The assay we had run confirmed Mr. Pegleg’s statement that the nuggets were 70% gold, 20% silver, and 10% copper. His theory was that the black came about from oxidation of the copper. However, an action of the sun and chemicals left from occasional desert storms builds up a coating on rock surfaces, referred to as desert varnish, which is common to the desert. Archaeologists sometimes use the degree of desert varnish coating at a site to establish dates for petroglyphs on rocky cliffs. There are areas near the Salton Sea that are entirely paved with small, lumpy pebbles that look identical to the Pegleg gold. Similar areas exist in Nevada and Arizona. Mr. Pegleg photographed one of his nuggets in situ and it was indistinguishable from surrounding rocks. Only by weight was he able to identify it. As a matter of interest, I used to display a black rock I had found alongside one of the real nuggets to illustrate the point. The dark color of the Pegleg nuggets may have been attributable to copper content, but I think that they were black rather than dark brown because of their desert varnish coating.

MacDonald: Speaking of pseudo nuggets, I heard from one normally reliable source that the nuggets from Mr. Pegleg were phony but that you refused to admit it because it would have discredited the magazine.

Pepper: That is ridiculous. Our correspondence must have had some perception of the man.

MacDonald: What is the indication of Mr. Pegleg’s identity?

Pepper: Never. It could have been anyone who walked into the Desert Magazine office to buy a book. I used to have a few suspicions, but none of them proved out when I tried various detecting methods we had devised. In one letter he said that someday he would make himself known to me, but I edited that out because it might have encouraged more than the usual number of threats we received. Actually, I worried about Mr. Pegleg. He stated in one letter that he still had an enormous amount of nuggets stashed away, untreated. I felt that what I didn’t know couldn’t create trouble for anyone.

MacDonald: Still, with all of the correspondence, you must have had some perception of the man.

Pepper: Well, strictly from intuition. Don, I’d say that he had put in some time on the desert during World War II. General Patton trained men here, you know. And then I’d guess that the man had a college education. His letters proved an ability to research a situation, assimilate information, and intelligently adapt it to an endeavor. His letters suggested a strong-minded, can-do sort of person to whom material wealth would be used for self-enlightenment rather than to achieve social status. I imagine him as somewhat of a loner, an idealist. He could be quite typical of any number of men I’ve met living in motorhomes while they fish at Campbell River in the summer. It would be
interesting to meet him sometime. It isn't often that an unknown stranger plays as important a role in one's life as Mr. Pegleg did in mine during the years that I was editor of Desert Magazine.

MacDonald: I know that you did a lot of desert exploration in those years. What is your personal idea of the location of the gold he found? Didn't he write that he believed there was much more still uncovered?

Pepper: A writer and explorer named Robert Buck from northern California came up with the best explanation in my opinion. Mr. Pegleg had speculated that his gold had been deposited in an old water course that had been covered with sand during eons of desert erosion and finally had been exposed again by winds to bake in the desert sun along with the black rocks surrounding it. Mr. Buck, however, pointed out that the composition of the black nuggets was more typical of northern California gold than of desert gold. He suggested that the gold had traveled to the southwest with a mule train, probably Peralta's, enroute to Sonora when California still belonged to Mexico.

It is possible that Pegleg, being a horse thief as well as trader and trapper, had attacked the train to steal its horses, had picked up a few of the black rocks that fell out of packs, but finding them black, hadn't valued them until later when a miner exposed them for what they really were. Whether or not old Pegleg was the culprit, the idea is a good one. Another theory is that the mule train could have perished in a flash flood, leaving a trail of black gold nuggets along the route of an ancient watercourse. In The Mysterious West, a book I wrote with Brad Williams, we subscribed to this last concept. The modern Mr. Pegleg also found it plausible. He had found a remnant of a sword scabbard near the site, which he sent to us and which we displayed in the office. A photograph of it was published in the July 1968 issue of Desert and it was identified by an expert as late 16th or early 17th century.

MacDonald: If the gold came from a mule train, wouldn't that eliminate the prospect of any more remaining?

Pepper: Oh my, no. Those mule trains were all but endless. In most instances the gold was melted into bars before it was transported to Sonora, but there was a smelter there too and it is possible that in some instances the gold was transported raw. For one thing, being black, it was disguised in the event of raiders.

MacDonald: If you were going after the Pegleg gold today, where would you look?

Pepper: The first place I'd look would be a library in order to research the usual route of Mexican mule trains. A number of books about the Peralta operation are available in historical society libraries, especially in Arizona and northern California. Then I'd match that information against the map from the early Desert Magazine referred to by Mr. Pegleg in his first letter. Then I'd get into a four-wheel-drive vehicle and follow the mule train route through the prescribed area until I came to a place paved with black desert-varnished rocks. Such places might extend for miles in all directions, but with persistence and a good metal detector, if the gold is there, it could be found.

MacDonald: Why haven't you tried it?

Pepper: Maybe I will, now that I'm back on the desert.
I've been told for years that there simply wasn't anything left at the old ghost camp of Masonic, in the High Sierra. However, on my first trip there recently I found a great deal, as you'll discover in my story. It's a tale of rich gold mining, the violent and mysterious death of one of its founders, and the community's painful decline and eventual death.

A Ghost Town Called Masonic

Story and photographs by Buddy Noonan

Historians estimated there may have been as many as 100,000 mining districts in the old West, and among that number must be included the tiny dot on the map known as Masonic. When gold was discovered at an elevation of 8,000 feet between the Sweetwater Mountains and Bodie Hills of Mono County, miners flocked to the area and built Masonic with great ambition and purpose, only once again in most of their lives, to see their dreams fade away.

There isn't a great deal to be found in Masonic today. To get there, you start from Bridgeport in California's High Sierras, driving along C-182, or Sweetwater Canyon Road as it's known locally, for four miles to the dirt turnoff on the right. This road isn't marked, so a close watch on your speedometer is important. Although most vehicles can complete the trip, I don't recommend oversized trailers. Winding along this scenic route for nine miles past such historic sites as the still standing Chemung Mine and Mill will bring you to the area marked as Upper Town. There were three sections in all that comprised Masonic District—Lower Town, Middle Town and Upper Town, each about a half mile distant from the other. At Lower Town a plaque dedicated by the Bodie Chapter of E. Clampus Vitus commemorates Masonic's significance.

Prospectors from Monoville discovered rich gold samples at Masonic in 1869. However, due to the excitement at Bodie and Aurora, it wasn't until 1902 that anything was done in the area. On July 4th of that year, Caleb Dorsey, John M. Bryan, and John S. Phillips discovered gold bearing ore that would become the Pittsburg-Liberty Mine. Being Masons themselves inspired the town's fraternal sounding name. The ore was rich, running from $35 to $800 a ton. Adding to the excitement was a nugget which Phillips displayed in 1904, assayed at $4,000 a ton, which he claimed was from a mine he had just purchased for only $49. All that can be said of Phillips is that he died rich. His body was found at the bottom of a 160-foot mine shaft in July of 1909. Was it an accident or the result of foulplay? No one ever found out for sure.

Lumber for building and mine shoring came from Mono Mills, 32 miles south of Bodie. From the Bodie Railway and Lumber Company, it was then transferred to six-and-twenty horse teams for the long 16-mile journey over treacherous Geiger Grade to Masonic. Soon, a road was put through to Bridgeport.

The first cabin was erected in the summer of 1904 in Masonic. Built of local aspen, the modern home even boasted a glass paneled door. Several hundred people flocked to the new boom camp. On September 29, 1905, a baby girl was born to Mr. and Mrs. Joseph K. Weitfle, the first birth in Masonic. By then, buildings, falsefronts, cabins, and tents had shot up all over Masonic Gulch. And as excitement grew, so did ambitions. On November 8, 1905, George Montrose published the first issue of the Masonic Pioneer, notable mainly because it became extinct almost as soon as it was printed.

The town was really becoming "cosmopolitan," boasting a butcher shop.

Pieces of the once majestic Pittsburg-Liberty Mine (above) lie collapsed against her hillside like so many dominoes. Map (inset) starts you at Bridgeport, Calif., and takes you to Masonic.
several boarding houses, saloons, a post office, school, and general store. But then, as with so many mining camps, the bottom dropped out. By 1909, unpredictable and irregular gold veins were harder to trace. Scarcity of gold-bearing ore brought on litigations, lawsuits, and poverty. Masonic was broken, and so were her people. The last resident was the postmaster, who,

because of government regulations, remained there until August of 1911.

The scene at Masonic today is saddening. Rich stands of aspen and cedar flank Masonic Gulch. Roads meander through fields of wildflowers and streams. Here and there, crumbling cabins and buildings have given way to the destructive forces of time, elements, and vandals. The once rich Pittsburg-Liberty Mine and Mill lies collapsed against her hillside, much as so many toppled dominoes. Cross and high above her, the ore tram stands deserted, timber pointing skyward as an epitaph to another era. Cattle graze unmolested on the once busy main street.

But perhaps the Masonic's final chapter has yet to be written. Many mines are re-opening in the High Sierra, and this could happen to the Pittsburg-Liberty. With improved techniques in prospecting and mining, this area could become a boomtown again. Until then, the old gold camp in Mono County's backcountry will continue to sleep, perhaps on a mattress stuffed with riches.

Logs for Masonic's sturdy cabins (left) came from Mono Mills, 32-mule-miles away. An ancient ore chute (above) stands nearly intact, mute testimony to the area's once golden riches.
A Basque Delight in the Desert

by Connie Emerson

THE TWO MEN STAND atop huge logs, bringing their razor-sharp axes to chest level, and then at a signal, they slash down at the wood between their feet. Working rhythmically with an endurance inbred through ages of battle against adversity, each man chops through his seven logs, competing to see who can finish first.

Watching with admiration bordering on worship is a crowd of dark-haired men, women, and children who look somehow as though they all might be related. The men wear berets, even those in business suits. Many of the women are dressed in white blouses and red or green skirts, banded in black to match
Girl (left) learned to dance almost as soon as she could walk. Patriotic Basques (opposite page) join in pledging allegiance to the flag.

Their bodices. They are the Basques of the western United States who gather each July at Elko in northern Nevada to celebrate their heritage and reinforce their ties with the past.

As a people, the Basques are like no other ethnic group. Their language is a linguistic puzzle; their beginnings, shrouded in mystery. Even their blood type is different, with an unusually high incidence of type O and Rh negative factor.

It is believed that they dwelt in the Pyrenees in prehistoric times, perhaps as long as 40,000 years ago. But in the 1800s, their land in Europe was unable to support its burgeoning population and a massive migration began. Young men left their homes to work on large cattle ranches in South America. Then, when gold and silver were discovered in the western United States, many of them moved north.

After the ore played out, they became shepherds in the West's lonely mountains and deserts, especially in southern Idaho and in the northern Nevada area around Elko. Strongly tied to kin and neighbors, they saved their earnings and sent for sweethearts, brothers, sisters, nieces, and nephews in the old country.

Today, with modern sheep technology, the number of Basque shepherders has declined dramatically. But the original immigrants set down strong roots in the desert. Most of their descendants have stayed on the sand and sage land. Many of the second and third generation have entered business or the professions. Others raise sheep from the same stock their grandfathers took in lieu of money as their

Man (above) competes in the weight-carrying contest.
herding wages.

Whatever their occupations, the importance of attending the yearly Basque Festival often approaches the fervor of religious duty. For urbanization, marriage with non-Basques, and the radically reduced immigration threaten the survival of Basque culture in this country. Their festivals, Basques feel, are a means of reaffirming their own ethnic pride and transmitting old country values and traditions to their children.

In the grueling wood-chopping contest, for example, both the number of logs and the act of chopping itself are rich with traditional symbolism. The seven logs represent the Basque motto, Zazpiak Bat — All Seven Are One. Although the Basques have lived for thousands of years in three provinces of France and four in Spain, their ethnic integrity has transcended national boundaries. They have retained the unity of their roughly 100-mile-square homeland in spite of invasions by Celts, Romans, Franks, Moors, Normans, Goths, and Hitler’s Germans, and despite efforts by the French and Spanish governments to assimilate them. The chopping competition also illustrates the two qualities, indarra (strength) and sendotaisuna (strength of character) which have enabled that ethnic survival.

Games are an important part of the festival and all of them are based on strength. In addition, most incorporate working skills which the people have relied upon through the ages. There’s a 300-pound weight lift and the weight-carrying competition, with contestants lugging 104-pound weights in each hand, sometimes for distances of close to 1,000 feet. In the sheephooking contest, Basque sheepherders use a six foot pole with a hook on one end—as their ancestors have at lambing and shipping time for centuries—to see who can catch and tie two sheep in the fastest time.

Tradition is transmitted, too, by various groups of dancers as they execute intricate patterns handed down from generation to generation. One of the biggest crowd pleasers is Txankarakua, Dance of the Dead Chief. The dance ends when the high-kicking men, dressed in white shirts and pants, red berets, sashes, and scarves, carry their fallen leader off the stage on a litter of sticks held above their heads. Other favorites are the Makill Dantza, a stick dance requiring fast footwork and rhythmic exchanges of blows, and the Ribbon Dance which symbolizes the unity of the Basque provinces. Like the Irish jig, most Basque dances require that the upper body be held motionless with arms upraised while the feet fly in a series of complicated steps.

Dancing isn’t restricted to the organized groups. Even preschoolers are encouraged to enter the jota dancing contest, with contestants in five age groups competing for prizes. And on both nights of the two-day festival everybody joins the dancing, with music provided by a Basque orchestra from Boise and an accordionist from Elko.

On festival Sunday each year, local priests and visiting ecclesiastical dignitaries celebrate Mass in the city park. Most years since the festival began in 1964, the Mass has been said in the Basque language by a New York priest who uses his vacation to attend the celebration. Deeply religious, the Basques in both Europe and the United States are almost 100-percent Roman Catholic. American Basques are intensely patriotic, also, and festival speeches are heavily laced with proud references to members of their race who have served in the armed forces and government.

After Mass, members of Euzkaldunak, Elko’s Basque club, serve meats, salad, Basque beans, rolls, coffee, and cake to the more than 2,500 Basques and visitors who attend a picnic. Though the meals have of necessity become simpler as the crowds have grown, they’re still hearty fare. Six hundred steaks are cooked at one time on the giant grill and dozens of lambs are barbecued, for the traditional Basque dinner includes at least two meat dishes. In keeping with their cooking philosophy that natural flavors should be enhanced rather than disguised, spices are used sparingly. The beans, for instance, are flavored only with ham and chorizo, the peppery Basque sausage. And, as with any Basque dinner, there’s an abundance of wine—drunk from conventional glasses or expertly directed in streams from goatskin bota bags.

In the heart of Nevada’s sheep ranching desert, Elko is rich with traditions brought over from the Pyrenees even when it’s not festival time. Two restaurants, the Nevada and Star hotels along the railroad tracks, serve Basque dinners the year round. Throughout the American West, the early Basque hotels were almost always located within sight of the train station so that new arrivals who knew no English could find them easily. The menus at these hotels which survive remain virtually unchanged from those of the early days. There are, in addition to the two meat dishes, steaming tureens of soup, pasta, potatoes, vegetables, and, of course, the ever-present wine. The food is served family style and most of the customers are Basques. And just off the highway running through Elko is a new Basque cultural center, built in the architectural style of the Pyrenees.

Next time you’re in that part of the desert, whether it’s festival time or not, take some time to get to know the Basques. It will give your trip a dash of chorizo.
When most people hear Terlingua mentioned, they usually think of the Chili Cook-Off. But to area residents of this West Texas ghost town, the Spanish name that means “three tongues” evokes an image of noble canyons and craggy cliffs, a sacred place where time stands still. The past continually confronts the present in a land where nature still holds the upper hand, commanding the sun to burn its relentless way across a horizon blessed by the majesties of water, earth, and sky.

Located in southern Brewster County, Terlingua and its immediate communities of Study Butte and Lajitas (pronounced La HEE tas) are only eight miles west of Big Bend National Park and the Chisos Mountains. It is separated from Mexico only by the snakelike Rio Grande, creating an area of dramatic contrasts. Here, the Chihuahuan Desert offers total serenity; there, colorful arroyos and severed canyons invite rugged exploring. Rafting the Rio Grande affords a choice of experiences in river trips, from the mild waters of the Colorado Canyon to the rugged currents of the Boquillas.

This wilderness, sometimes called the badlands, was once occupied primarily by three Indian tribes, the Apache, Comanche, and Shawnee. Mexican herders settled into the area as early as 1860, and in 1885, Confederate General Richard Gano of Dallas established ownership. Gano was known as a surveyor as much interested in preaching as selling land. “Today I saved twenty souls and sold sixteen sections of land,” he wrote in his diary.

The discovery of cinnabar ore, or quicksilver as it became known, transformed Terlingua into a thriving, bustling community. The legendary Howard E. Perry, of Portland, Maine, presumably acquired the ore-rich land in lieu of payment of a debt. But regardless of how he came to own Terlingua, Perry and his rule of the Chisos Mines gave new life to this isolated community. The mines, which were open from 1891 until 1946, provided generations of Mexicans with employment. They lived in primitive adobe and tin houses, much like their ancestors, and were totally dependent on the Chisos Company Store for their everyday needs. It was a rigid company town and Perry’s reign was so strong that he was able to influence the postmaster to remove any mail order catalogs that arrived so that no business would be taken away from the local store.

The Post Office was established in 1905 when the population reached 1,000. The town also had a church, a one room school house and a jail. Perry built a 10-bedroom mansion for his wife, but Mrs. Perry spent only one night in the house and went back to Maine the next day, never to reappear in her husband’s booming mine town. Like Mrs. Perry, the original buildings of the town have disappeared, and there is little now to indicate the mining heyday of Terlingua. In 1922, 40 percent of the cinnabar mined in this country came from here.

Now, the remains of the stucco mansion stand in solitary majesty against a backdrop of the Chisos Mountains, and the jail and school are crumbling. Although the ghost town itself has a population of less than 25 persons, the area is beginning once again to attract permanent residents. Three state-funded teachers are responsible for children in the tri-community towns of Terlingua, Lajitas and Study Butte for grades one through eight. After eighth grade, the children are bussed to Alpine, an hour and a half away.

The wife of Terlingua’s developer, Howard E. Perry, spent one night in the town and buffed back to Maine, never to return.
TEXAS, U.S.A.
by Sharon Sheppard
Young men like Mike Davidson and Steve Harris came to Terlingua after visiting the area and realizing it offered them a chance to live where they could make a decent living by doing something they loved, namely being outdoors. Steve and Mike are partners in Far Flung Adventures, river trips that are "participatory in nature, designed to introduce families, groups, and individuals to the feeling of self-reliance that wilderness travel can offer." These new residents of Terlingua are extremely ecology minded, interested in maintaining the wilderness that brought them here in the first place. "I like the cleanliness of it," explains Davidson, "the rivers and the mountains are nearby, and I can see fifty miles into the distance when I stand on my front porch."

There is no question that the annual chili cook-off has been responsible for much of Terlingua's recent fame. After the closing of the mines and the eventual desertion of the town, there was little left to do in Terlingua. In the fall of 1967, it all changed. In response to an article in Holiday Magazine written by the late H. Allen Smith and entitled "Nobody Knows More About Chili Than I Do," a group of Dallas businessmen organized a cook-off between New Yorker Smith and Texas's own Wick Fowler. The article, as Smith relates in his humorous book The Great Chili Confrontation, "set the jackals of Texas and particularly the hungry hyenas of Dallas against me, in full cry." Terlingua was deemed the "chili Capitol of the World" by the Chili Appreciation Society, and from then on, the annual World Championship Chili Cook-Off took on national proportions.

CBS's Charles Kuralt, in his book Dateline America, describes the event as "the annual bourbon guzzle, beer bust, and chili cook-off on the banks of Dirty Woman Creek." Kuralt also refers to the town as being occupied on one day of the year by an assortment of people "who share little but the conceit that each of them makes the world's finest bowl of red."

The original spirit of the event has changed since it first began. The all-male contestant rule never made it past the first year, and each fall the numbers of entrants increased to the point so that now it is somewhat like a Western-style Woodstock.

Terlingua (see map) is best known for its annual chile cook-off, with contestants (center) adding wine to his entry. However, the ghost town has recently attracted some permanent residents and even the ruin (left) might once again ring to the laughter of children.
with chili contestants of all ages taking over the area. Private planes land on the dusty airstrip in large numbers, disgorging all sorts of “chili heads” and members of the press, most of whom leave that same evening. The event has been moved from its original location in the crumbling ghost town proper to Arriba Terlingua, a nearby “suburb.” Most of the townspeople stay off the highway that day and display an attitude that is described by one native as “benign neglect.”

In spite of the annual, very temporary, commercialism that the chili cook-off has brought to the area, sincere nature lovers are drawn to the towns west of Big Bend. Rockhounds, photographers, and wildlife enthusiasts have ample opportunity to pursue their interests. An almost prehistoric peace pervades the Christmas Mountains where white-tail deer are often seen. The desert is the home of the javelinas, coyotes, and mule deer, and on rare occasions, cougars have been sighted in the heights of the Chisos. Succulents such as creamy white yuccas, century plants, cacti, and a variety of shrubs mark the desert, and the unique siempreviva rejuvenates itself to show why it is known as “Resurrection.” Agate, topaz, and petrified palmwood, the official state stone, are familiar findings for rock buffs.

At one time the only place to stay was in Arriba Terlingua at Glenn Pepper’s Villa de la Mina Hotel. Now, in addition to Pepper’s Place, as it is known to the old-timers, there is an authentic Western-style hotel and saloon in Lajitas, The Cavalry Post. The Terlingua Ranch Resort is 50 miles northeast of the ghost town and offers full guest conveniences. For recreation vehicles, a park near Study Butte is complete with laundry facilities.

One of the most scenic highways in the southwest is El Camino del Rio (The River Road), Highway 170. It is 68 miles of river, mountains, desert, and farm land—a ride to soothe the senses.

The future of Terlingua? Who knows. The dusty streets and crumbling buildings of the ghost town are hardly mystics, with crystal balls to see tomorrow. Yet there is space, clean air, and a separate peace in this part of the world. And as the cities continue to spawn concrete ribbons and murky skies, the urban crush grows more desperate. Here in Terlingua, where the mountains and rivers change only as nature commands, the human mind can find rest and renewal. That, in the final analysis, may count a great deal more than any monument of a technological age.

Frisco Canyon near Lajitas forms a magnificent backdrop to the abandoned mine carved into the base of the bill.
Another view of Frisco Canyon (opposite page) shows the Rio Grande winding its way lazily between two nations. The graves of Terlingua (below) were built to withstand both the elements and the coyotes. A predominantly Mexican population lent both piety and permanence to the memorials. Sturdy stone house (bottom) is typical of the dirt-floored structures not lived in since the early 1940s.
EARLY SPRING DAYS in the desert are luscious. The earth tilts, the juices of life stir, a young man's fancies turn to a lady's smile, and the world is puddle-wonderful. It's the Season! The time for flashy cars and warm evening drives, spring training and tennis tournaments, dinners and dancing — desert delights.

It's also the time when the desert blooms, figuratively exploding with color, shape, and

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A typical modern hot air balloon (left) costs its owner about $10,000 to buy, much more each season to operate.
The ocotillos stand green against a dark blue sky; barrel cactus flowers of violet cast their own shadows; and after the big rains of this year in Arizona and California, we may be in the only green desert in the world.

And one of the best ways to enjoy the fragrance and silence of a desert sunrise is to witness it in a hot air balloon.

"Do what?" you ask.

That's right. Take a hot air balloon ride. In the Coachella Valley of Southern California it's easy. All you have to do is get up in the dark and drive to the lush green grounds of the La Quinta Hotel, "Get in!" when pilot Dan Glick of the Sunrise Balloon Company tells you to, and, as you climb into the wickerbasket, it's up, up, and away.

But your stomach doesn't drop as it does in an elevator. It's gradual like an ascension should be. You just move away from the earth. The pilot checks the temperature and altitude instruments and if he wants to go higher, he gives the balloon a shot of heat from the big Bunsen burner above the basket. If he wants to drop down, he either lets the balloon cool itself or with a yank of a cord, he peels back a panel of the balloon and the hot air escapes.

But that's about all he can do — go up and down. For you see a balloon is a lighter-than-air craft with no propelling system and no means of controlling horizontal flight, it's an aerostat — an aircraft supported by the buoyancy of the atmosphere. That's why aeronauts say that hot air ballooning like life has its ups and downs.

To go the direction you want, you must follow the flow of the wind. At lower altitudes the wind may be blowing away from your destination. Five hundred to a thousand feet higher the flow might be just to where you want it. And that's the trick — to know the wind. It's like sailing except you can't tack into the wind. You can't fight it or struggle.

The trio of balloons (below) is operated from October to May each year by Sunrise Balloons, a company licensed to carry passengers. Home base is the beautiful grounds of La Quinta Hotel near Palm Desert, Calif. (Photo: Gary Squier)
against it. You have to flow with it, for hot air ballooning is blowing along with the wind.

All forms of flight are poetic, lyrical, beautiful, and at times inspirational. Since the myth of Icarus, human desire for free flight has been constant. It's even in our dreams.

Leonardo de Vinci was one of the first to take that dream into the realities of scientific speculation. In 1505 he worked out the rational principles of flight; specifically, that air had weight and exerted pressure. The rest was easy. One had but to apply that knowledge, but unfortunately, de Vinci never told anybody. He wrote his calculations and notes in his workbooks in a way so that they could only be read in a mirror.

So it wasn't until Joseph Michel and Jacques Etienne Montgolfier got interested in chimneys and the behavior of smoke that hot air ballooning had its first successful test of flight with a live cargo that did not include the Montgolfier brothers. Frenchmen aren't stupid. Thus, on September 19, 1783, the Montgolfiers were safely on the ground watching a sheep, a duck, and a rooster take off in a balloon made of linen and paper, filled with hot smoke. They (the animals) reached an altitude of 1,500 feet and flew one and a half miles before landing. The balloon then was immediately surrounded by terrified French peasants who destroyed it and killed the animals, thinking the latter were from the devil, Mars, or perhaps even Englishmen in disguise.

But the test was a success. Since that time, hot air balloon flight has been continuously refined. In the nearly two centuries that have followed, balloons have been made of natural and synthetic rubbers, nylon, and more recently, from a polyethylene plastic called Mylar which absorbs less solar energy and therefore is less sensitive to atmospheric changes.

In 1844 an American aeronaut invented the ripping panel for quick descent. Instead of an open fire in the gondola, tanks of liquid propane that can be replenished in flight now fuel the burners. And balloons have been used in space technology, also. Bailouts from 113,500 feet in 1961 by Commander Malcolm Ross and his crew tested pressurized suits later used in manned space flights.

The basic principles, however, haven't changed, even with makeshift materials like the balloon Hans Stelczek, an East German mechanic, and his family built in 1979 from 60 different pieces of canvas and bed sheets, a cast-iron platform with posts at the corners for hand holds, and a rope anchor. It flew them to West Germany and freedom.

Hot air ballooning today is a very competitive sport. Aeronauts race for distance and compete in spot landing matches where a tiny target must be hit, cross-country races, and hare and hound chases. Each year in Albuquerque, New Mexico, there is an international
Although a collision would seem imminent (below and right), the balloons drift along with the wind at the same pace and in the same direction.

Several ballooning companies, including Sunrise Balloons, cooperate with the *Weekly Reader’s* program for science classes in elementary and secondary schools. And the kids love it. Professional balloonists also work with television and motion picture studios filming commercial products. Where else could you get a boom like that in the middle of the desert that will hover at six inches above the ground or pull up, up, and away with a blast of the burners?

And then when your time in the air is over, the pilot radios to the chase vehicle that has been following you throughout the flight, and he lets them know where you’re going to set down. That’s when you learn why the pilot flies for as in all flying, the exciting parts are taking off and landing. That’s especially true if you drop down anywhere near people. They come running toward you as you descend slowly and silently. Kids help fold up the balloon and carry it to the chase truck. For that they get a toy balloon and some good cheer. It’s all so friendly, so curious, so perfect!

And what is more, no form of transportation could be kinder to the fragile desert ecology. A balloon leaves no tracks as it enters protected areas. Unlike a helicopter or airplane, it lands and takes off without creating a miniature sirocco. And, too, prudence behooves the pilot to avoid setting down on top of cacti, smoke trees or mesquite. Fire? Little likelihood, as the burners can be shut down instantly and the balloon itself is constructed of flame-retardant materials. Ballooning, in fact, is akin to motherhood. Who could be against it?

ballooning festival, and more desert cities are looking for a piece of the action.

But this is all academic to you because you’re still up in Sunrise’s balloon, floating around Palm Desert and Indian Wells, California. The fact is that unless the wind is really ripping, ballooning like sailing can be a little boring for passengers. So in-between blasts from the burners, you talk with the pilot and ask questions about balloons and what’s over there, and how is the ballooning business, and why do you do it?

You find out that ballooning pilots are licensed by the Federal Aviation Agency. To get a private pilot’s license requires a flight training ground school, a test, 10 hours of flying time, and a solo flight with an FAA inspector who asks a lot of questions and puts you through a series of standard maneuvers. Then to maintain your license, you must log three takeoffs — and landings — every month. A commercial license, which allows you to carry paying passengers, requires a minimum of 35 hours of logged solo flight.

You also learn that ballooning is a pretty big business. There are national and international associations, the Ballooning Federation of America that coordinates activities at local and regional levels, and a bi-monthly journal for balloonists that is both interesting and very colorful for the balloons themselves, you can see, are ablaze with color.
EGYPT'S DESERT LIKE MARS

Washington, D.C. — Imagine a place where virtually no rain has fallen for 20 years—a desolate, windswept wasteland of dunes, rocks and vast, featureless plains. This is the southwestern desert of Egypt—one of the driest regions of Earth.

It is a place almost as inhospitable to life as the surface of Mars.

In fact, the analogy between the southwestern Egyptian desert and the "red planet" goes even farther than this, says Dr. Farouk El-Baz, research director of the Smithsonian Institution's Center for Earth and Planetary Studies.

Satellite photographs reveal striking similarities between the southwestern Egyptian desert and Mars. "We see nearly identical features in the two habitats that startle, surprise, and even confuse the experts" says El-Baz, who has scrutinized literally thousands of satellite photographs. "Alternating bands of dark and light streaks, boulder-strewn fields, and pitted rocks—these are some of the features common to both. You can hold two photos side by side and ask, 'Is it Earth or is it Mars?'

The curious similarity between earthly deserts and Mars prompted El-Baz to conduct a field expedition to the southwestern Egyptian desert. "On the trip, we confirmed the enormous power of the wind to create landforms," he says. "As a result, we feel that the wind has not been given enough credit for shaping landforms both on Earth and Mars. These findings have made us rethink our theories and assumptions about the formation of deserts and even what lies in store for the Earth in the eons to come."

El-Baz feels comfortable making this last statement because all the planets in the solar system were probably formed at the same time and from a common origin. Their differences in chemistry, geology, and weather stem from their different masses and varying distances from the Sun. At the Center for Earth and Planetary Studies, the research arm of the Smithsonian's National Air and Space Museum, El-Baz carries out comparative studies of the Earth, its moon, and other planets in our solar system and their moons as a way of learning something about our own earthly environment.

What intrigues scientists (Cont. on pg. 39)

SNACK TAKES 1427 GALLONS

Riverside, Calif. — Any idea how much water it takes to produce a hamburger, french fries, and a coke?

The answer is 1,427 gallons from farm to counter according to Herb Schulbach, University of California soil and water specialist.

And if you have a steak dinner with potato, vegetable, salad, and watermelon for dessert, it would take about 2,897 gallons.

"The typical daily food requirement of 2,570 calories requires the use of more than 4,500 gallons of water every day," the Cooperative Extension scientist states. "That's a lot of water especially when we worry about having enough for all the needs of our expanding California population."

That's the bad news, but there's good news, too, he said. Water is a renewable natural resource which can only be used in its passing. Once it is gone, it can only be used again after returning through a cycle.

"You could say that water is wasted if it is not used," said Schulbach. Water circulates unendingly from the earth's moisture from the oceans to the atmosphere then to the land and back to the ocean. It is unpredictable as to quantity, timing, and frequency and is controllable only to the extent that it can be stored or used in passing.

"Because of this unpredictability, we must use it wisely," Schulbach warned. "To meet our increasing demands we must develop water for urban, industrial, and agricultural needs to the maximum, and keep in mind environmental needs, too."

After all, man's history indicates his successes are a result of his ability to manage his water resources successfully and his failure to manage water resources has resulted in the failure of his civilizations, he said.

— Palo Verde Valley TIMES

“Uncle Charley” Burdick, born 30 years too soon. Story by Don Pelon on page 40.
Two study sites were involved. These were the grazing allotments of Carl Weikel in the vicinity of Searchlight near the extreme southern tip of Nevada and the Foremaster allotments on Mormon Mesa, north of Las Vegas.

Initially, plants were collected in the two areas to determine what kinds of plants grew there. Tissue sample of these plants was taken and individual cell structure of specific plants was identified. "Fecal samples on a monthly basis were taken to determine what the cattle in the areas were eating," Dr. Burkhardt said, adding, "the samples were analyzed at laboratories of the renewable natural resource center at UNR. We used the relatively new technique of identifying parts of leaves and stems of plants in the fecal samples based on their cellular structure as compared to that we had already identified for various plants." Dr. Burkhardt noted that the technique has proven reliable.

Dr. Burkhardt said that when moisture is received on the desert at the right time in fall and winter to germinate a good crop of annual grasses and forbes, or non-woody plants, the cattle utilize such feed extensively over the six or so week period that it is available.

However, the rest of the time and during years when the annuals do not grow, they survive and exist on the perennials.

Among the most important perennial grasses eaten as forage are biggalleta grass and bush mubly, while important perennial shrubs include range tataky, blackbrush, and Mormon tea. Among others often eaten are Joshua tree buds and flowers, bursage, purple sage, buckwheat, and wolf berry. There are also 30 or 40 more perennials of which traces can be found in the cattle's diets.

"Previously, such plants as blackbush and bursage were thought unpalatable to the cattle," Dr. Burkhardt said, pointing out that, "under such an assumption a piece might be written off as unsuitable for cattle. But, this would not necessarily square with what the animals actually eat." Dr. Burkhardt said that based on his observations, cattle that are acclimated to the southern Nevada areas look about as good and fat as cattle in the northern "cow country" of Nevada.

"Of course," he stressed, "it is necessary to have cattle that have more or less evolved in that environment to do well. Take an Idaho or Montana grass range cow and put her in these deserts and she would not know what to eat."

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**GIANT METEORITE REMEMBERED**

By Blythe, Calif. — Finding a chunk of meteorite at a Quartzsite rock show wouldn't mean as much to most people as it did to Elliott Barber of Blythe.

For Barber it brought back memories of a 1929 expedition at Meteor Crater, Ariz.

The 18 oz. meteorite he obtained at Cloud's Jamboree in Quartzsite is a piece of that famed meteor. It was given to Barber by Lorraine Hillkin, daughter of Walter Geogline, a man Barber worked with at Meteor Crater.

"It had a price tag of $200, but they gave it to me," Barber said. "When I was at Meteor Crater I could have had tons of it if I had the foresight."

Barber was part of a crew which in 1929 sank a shaft approximately 700 feet under the floor of the gigantic crater in Northern Arizona.

Object of the expedition was to find the meteor that created the 4,000-foot wide and 570-foot deep crater.

Finding the meteor was the dream of D. Moreau Barber, who believed it would be worth between $500 million to $1 billion due to its iron and nickel ore content.

The meteor is thought to be 81 feet in diameter and contain 92% cobalt plus traces of platinum and iridium.

The largest piece found to date, which is in the Museum of the Meteor Crater, weighs 1,406 pounds. More than 15 tons of meteorite have been shipped away from Meteor Crater.

"We struck water at 620 feet, and it was just like shoveling sugar," Barber said of the silt which is under the crater. "We struck water at 620 feet, then we dug another 80 feet. It took longer for that last 80 feet than the 620.

"We worked in hip boots and rain gear, but we never got to it (the meteor)," he continued. "There's an ocean of water down there."

Approximately 30 men were involved in sinking the shaft for the Southwest Metals Co.

Scientists believe Meteor Crater was formed 22,000 years ago when a huge meteorite struck the earth. Most meteorites burn up soon after entering the earth's atmosphere, but apparently that one was of such immense size that it did not incinerate.

"If they started mining it again I would go there even if it was as old as Methuselah," Barber said.

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**BIOLOGISTS FEAR SALMON RUNS HURT BY DREDGING SURGE**

Seattle, Wash. -- A fishery biologist says he fears dredging by a rush of gold prospectors in the state's rivers and streams will harm salmon runs this spring.

Millard Deusen said he is concerned because hundreds of people, spurred by higher gold prices, are buying portable dredges that suck up material from stream bottoms and separate any gold from gravel, silt, and sand. Salmon lay their eggs in shallow gravelly areas.

Desert News Service
ICE WATER HELD THREAT TO HEALTH OF MANKIND

Tonopah, Nev. — Among the many threats to life, liberty, and happiness in early-day Nevada was a persistent group of women and wrong-headed, blue-nosed men who insisted that liquor and those places which dispensed it were among civilization's foremost evils.

Drunkards could ignore and dismiss them easily enough because their numbers were small, but the editors of the Comstock Lode sometimes took another tack and attacked temperance groups on their own grounds. Typical of these pointed tacks was the following which appeared in the TERRITORIAL ENTERPRISE in August of 1876.

"While there is no doubt that intemperance in the use of ardent spirits is one of the most deadly evils to civilization, it is equally true that in temperance in the use of ice water is rapidly undermining the constitutions of American men and women. As a nation, we are fearfully addicted to cold drinks, and there is imperative need of an organized movement to fight the demon of ice water.

"Strange as it may seem to the conscientious man who comprehends the deleterious effects of cold drinks, there are thousands of our best and noblest citizens who are victims to the cold water habit. They begin the day with one or more glasses of ice water before breakfast. During that meal they frequently turn from the coffee which cheers but does not inebriate, and satisfy their depraved taste for water. On their way to their business, they stop at the numerous drug stores which shamelessly flaunt their soda water fountains in the face of the public and hastily pour down the deadly ice water which perverted humanity makes palatable with cream and syrups. In the store, the water cooler, filled with the stomach and tooth destroying beverage, is always at hand, and when the water drinkers return home after a day of constant drinking, they often must spend the greater part of the night in solitary and aquarial debauchery.

"The result of the pernicious habit has been to fill the country with a class of stomachs that are incapable of any earnest digestive efforts, and to crowd the chairs of busy dentists. American stomachs and American teeth are daily growing feeble and weak. Time is apparently at hand when a set of false teeth will be presented to every new-born infant at the same time that he receives his first India rubber ring, and when all sorts of stomach bitters and digestive pills will invariably supplement his daily meals.

"The deadly effects of ice water are particularly noticeable at present. When an overheated man desires an attack of congestion of the brain, there is no plan which he could devise which would be better adapted to secure the end desired than that of drinking water of, or below, the temperature of 32 degrees. Yet this is precisely what scores of so-called temperance men are continually doing. It is sufficiently irrational and dangerous for men to drink brandy and whisky in hot weather, but it is a question whether ardent spirits are really more immediately dangerous to health than the ice cold beverages which even the most earnest teetotallers pour into their astonished and indignant stomachs.

"Water is undoubtedly the most wholesome beverage (Cont. on pg. 43)
Uncle Charley made a living and a little more even when gold was government regulated at $32 an ounce.

30 YEARS TOO SOON

by DON PELON

Tomstone, Ariz. — If ever a man was born 30 years too soon it was “Uncle Charley” Burdick.

Charley dug gold all his life and he never made more than a bare living at what was not only a vocation, but an avocation as well. He loved gold—not only for its monetary value, but for the sheer joy of finding it.

By 1980 standards he would have been a wealthy man, but back in 1957, when this Faber pusher first met the agile 77-year-oldster, he was reduced to living in a tin and cardboard shack, with only a tame deer for a companion. Food was scarce on his table and the old man was considered to be poverty stricken.

Way back around 1912 he had hit the prospect trail. He’d wandered all through the West. Worked for Homestake in South Dakota; down through the Rockies in Montana, Wyoming, and Colorado. He tramped through Idaho where the winter snows were deep; braved the blistering sun in Nevada and Utah; knew the mining camps of Kingman and Humboldt in Arizona; sweated in the underground diggin’s at Cripple Creek; spent time in Oklahoma’s lead mines, and a bit in New Mexico. The middle 1950s found the miner in Wisconsin. It got cold, then awfully cold, Charley pulled stakes and headed back for the Southwest and ended up laboring in a “shirt-tail” mining operation near Golden. It was at this time that he learned of a group of old and at one time, good, producing claims that were open for location, about a mile south of that near-ghost town.

Charley staked!

But he didn’t stake just for speculation. Nor did he expect to harvest a
Tragic end came around 1965 when Charley Burdick was trapped in his flaming shack and burned to death.

golden fortune from the earth. He made his locations with the thought in mind of building for himself a tiny miner’s cabin, and working his properties for his living.

He also desired to establish a place where others—miners of the part-time variety, as well as those who were working at making a living at it—could come and dig in the earth, search for gold, and have a chance of at least putting some frijoles in the old pot in return for their efforts. His idea panned out and in the months that followed Charley taught the rudiments of placer mining to quite a few men and women.

The area surrounding Charley’s shack was pock-marked with small shafts, each with its own windlass and ore bucket. We learned that this was “good” placer ground, with anything from a few to 30 feet of overburden to bedrock. Here Charley and his friends have sunk dozens of shafts to bedrock, branching out and gophering on the contact, grubbing loose the rocks, gravel, and gold that lay in depressions on the solid limestone bed. This they hoist to the surface where it is dry-panned or sluiced, the water for which must be hauled several miles.

On up the arroyo were the rather extensive workings that our host was currently working. Here we stopped to watch him fire up a gasoline powered dry washer, throw a couple of showelfuls of gravel into the hopper, then dry pan the concentrates. There was a good showing of color—not a lot, but after all, what does one expect from two scoops?

Soon we left the wash and headed up the mountainside. It was at this point that rugged outdoor living displayed its advantage over sitting at a desk for our guide, though he was more than 30 years senior, bounded over boulders and up the mountain in goat fashion. I, though, found the going tough and the desire to sit and rest came often. Soon we came upon a vertical shaft, collared with hand-hewn logs. The square nails employed in construction indicated the age of the workings. This, we learned, was part of the old Mary Catherine workings. A bit farther on was a clean adit that had been driven a couple or three hundred feet into the mountain in an attempt to cross-cut the vein on which the shaft was sunk. They never met.

Charley kept us on the move. We visited the “Goldsmith,” the “New Mexico,” the “Mascot,” the “Holy Week,” and a dozen or so other one-time producers, before dropping down off the mountain a couple of hours later.

Arriving back at Charley’s little shack we sipped cool water, stroked the pet deer with which the old man shared his humble home, and learned that the district is highly mineralized, with copper, lead, zinc, gold, silver, iron, arsenic, manganese, and other elements having been identified. In main, Charley and his friends worked the gold placer deposits, none having the equipment for hardrocking.

We learned that it was Charley’s philosophy that there’s plenty for everyone, so he welcomed prospectors to enter upon his claims and pursue their search for the magic gold. He didn’t charge them anything and the diggers kept the gold they won from the earth. Yes, he asked to be consulted about the places they planned to work, and he frowned upon the careless handling of fire, but other than that the sky was the limit. Indeed, here was the true friend to weekenders and professionals alike.

I asked Charley if it was possible for a man to make a living in his diggings. “Yes,” he said, adding, “if he’ll work. But the trouble today is that most miners or prospectors in a setup like this expect to make a big cleanup on two or three hours’ labor a day. You can’t do it that way. But if you’ll dig in from sunup to sundown you can take a living and a little else besides.”

Were Charley Burdick alive and healthy today, he’d have a property worth millions. Ironically, with all his care in the use of fire, he was trapped in his little shack when it burned to the ground around 1965, so Old Charley never got to see the realization of his dreams—the thorough placering of his ground.

Living and dying in poverty, the old man was rich in friends and left a treasure trove of knowledge, imparted to those whom he taught to seek and find riches in the gravels of his diggin’s.

Chances are that with the price commanded by gold today the value of Charley’s ground is well recognized, and there isn’t a square inch of land open for location. It’s a tribute to the knowledge of a “gold man” who was born 30 years too soon.

—Western Prospector & Miner
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Collecting Sites Update: Nice specimens of petrified wood can be found in the desert near Plaster City, California. The color is mostly brown and it polishes well, showing the wood grain. In addition, outstanding limb sections can be picked up, and these make interesting unpolished display pieces. With all of the rain this locality received during the winter, I am sure a great deal of new material has been exposed. The wood can be found in a wide area, concentrating north of Interstate 8 between Plaster City and Painted Gorge and continuing north to the bombing range boundaries.

The Spencer Opal Mines, near Spencer, Idaho, will be open for their 13th summer of fee collecting. Over the years some spectacular material has been taken from this location. The public can dig Saturday through Thursday, from 8:00 a.m. until 4:00 p.m. The fee for collecting is $12.50 a day, per person digging up to five pounds of opal. $2.50 is charged for amounts over five pounds. If you do decide to visit the Spencer Opal Mines, be sure to take hammers, chisels, and other hard rock equipment, as well as good safety glasses.

Anna Cuesta’s fire agate will be closed for the summer, due to the heat, but will once again be open in the fall. The fee is $2.00 per day, per person, no children allowed on the claims, and they do not bulldoze the area. It is hard rock mining, but some very nice material can be found here. The claims are about 20 miles from Kingman, Arizona, on the road to Oatman. Inquire at Ed’s Camp, just east of Oatman.

Equipment: Ultra Tec has announced production of two new pieces of equipment, including a 72 index gear for their faceting machine, which will, among other things, aid in making heart-shaped stones. They also have developed a new tin polishing lap for faceting. It is available in eight-inch diameter with a one-half inch hole and consists of one-tenth inch of tin bonded to the base. This will help eliminate the “orange peel” effect which often causes a problem with older tin laps. For more information, write Ultra Tec at 1025 E. Chestnut Avenue, Santa Ana, CA 92701.

Loretone has come out with the first new piece of equipment since the former subsidiary was purchased from Carborundum last fall. It is a new Diamond cabochon machine, the GCD-1, which consists of 6" x 1/2" 100 and 600 diamond wheels, expandable rubber drums with chargeable resin belts, and a six-inch polishing head and pad. In addition, it is complete with a flexible lamp and coolant squirter. Write Loretone, Inc., 2856 N.W. Market Street, Seattle, WA 98107, for more information.

Shows: The Arlington Gem and Mineral Club will be sponsoring their 23rd annual Gem and Mineral Show to be held at the Inn of Six Flags, in Arlington. Texas. It will be on May 3rd and 4th and includes educational displays, competitive collections as well as dealer booths.

Helpful Publications: The American Geological Institute publishes, among other things, a very helpful booklet entitled “Maps and Geological Publications of the United States — A Layman’s Guide.” It lists virtually every imaginable source of maps and geological data available. Within each state section are listed publications under such headings as “Bibliographies,” “Earthquakes,” “Landforms,” “General Geology,” “Mineral Resources,” and “Rocks, Minerals, and Fossils” (which includes publications about rockhounding in that particular state). This is a most useful reference and has given me countless ideas for sources of information. If interested, send $30.00 to the American Geological Institute, 5205 Leesburg Pike, Falls Church, VA 22041.

Final Note: As summer approaches, remember that the temperatures in the desert start climbing. Be sure you are properly equipped if you plan to travel a long distance off the main road in quest of gem and mineral collecting. Let others know where you plan to go. Take extra water and food, and, if you have car trouble in a remote area, most experts recommend staying with your vehicle. Many a life has been lost when campers leave their car in the severe desert heat and start hiking for help. Vehicles are much easier to locate than solitary hikers. It is also a good idea to carry a small survival manual in your car in the event you do have problems. It can give you many ideas of what to do until help arrives. I have never been stranded, and I hope I never will be, but I’d much rather be prepared for it and have it never happen, than not be prepared and have my life in jeopardy.
Calif. — "We're just like Abe Monomania Gold Mine, bulldoin' a log cabin," mused gold miner Newt Peeler, 39, as he and his wife surveyed their home with obvious pride.

Newt, his wife, Jean, and their two children, Rocky, 19, and Shirley, 17, recently completed their log cabin deep in the woods of Trinity National Forest in northern California, 100 miles west of Redding.

"It's a helluva challenge. Got no TV. No telephone. No electricity, but it's a damn sight better than the year I spent behind the bench in a shop in town," Newt said.

To get to their mine and nearby log cabin, the Peellers walk a mile through the woods from the end of a dirt road. Then they cross a 300-foot suspension bridge they constructed to span the south fork of the Trinity River.

After that it's another half mile up a steep hill to the cabin.

"Everything we own had to be carried on our backs from the end of the road," Newt said. "That heavy old iron box, them bedsprings, all the furniture, my tools, the works.

"I looked three years all over these hills. This was the only damn place I could find any gold of any quantity as well as quality.

"It's a mighty challenge tryin' to figure out where the damn gold is. Lookin' for somethin' you can't even see. It's ridiculous. Get what I mean?

"They're not laughin' any more. The hills are crawlin' with people like me."

With the price of an ounce of gold soaring around the $600 mark, gold mining is becoming a way of life for hundreds of Newt Peellers in California's gold country.

Most are out in the hills on weekends and vacations. Many, like Newt, are taking a gamble and devoting full time in pursuit of the elusive metal.

When Newt finally found the place in which he believes he will strike it rich, he filed three claims and started to work.

"When Newt located his claims, he told me and the kids to pick out a name for the mine," said Jean. Newt chimed in, "Jean and the kids came up with Monomania."

"We found it in the dictionary. It means pathological obsession with an idea. That's Newt and gold minin'," Jean explained.

Newt operates a small river dredge and suction pump to vacuum gravel and sand from the river bottom through a huge hose that carries sediment over riffles in a sluice box where the gold is trapped.

Finding out from miners how well they're doing is like asking a priest what he heard in the confessional. Newt is typical.

"I'm not gettin' rich, if that's what you want to know," he confided as he moved the hose slowly along the river bottom. "I'm making enough to pay the bills."

A veteran miner, asked what he thought about the Peellers chances of developing a paying mine, observed, "He's erected a cabin and shows permancy and that means the Forest Service will be down on him. They'll pull out all stops to drive him off his claims."

— WESTERN PROSPECTOR & MINER

Los Angeles, Calif. — Until recently, the airwaves between Los Angeles and Las Vegas have been almost as unoccupied and silent as the high desert landscape. Motorists using Interstate highways 15 and 40 had only intermittent AM radio and no FM services at all.

Now they'll find two oases in this radio desert: KRXV radio at 99.5 and 98.1, covering the area form the Cajon Pass to Las Vegas. Two transmitters are used. The first frequency, 99.5, will hold from Los Angeles to the Baker Grade area on I-15 and then you switch to 98.1 for the remainder of your trip.

This innovative concept is designed for what KRXV president Howard Anderson calls a "mobile community," the first of its kind to be licensed by the Federal Communications Commission.

"Traditionally, a radio station serves the residents of a certain geographical area," Anderson explains. "However, there are 23 million people who travel I-15 and I-40 each year between Las Vegas and Los Angeles. From my view, they are as much a community — and a rather impression one at that — as any other. They have media needs that simply weren't being filled."

KRXV broadcasts "middle of the road" (pop) music, news, lodging and recreation information weather, and traffic reports from Caltrans and the California Highway Patrol.

Desert News Service

BAD LUCK HITS RENO CASINOS

Reno, Nev. — The Money Tree has dried up.

The Money Tree was one of the newer, neon-flasy gambling casinos on the main drag of this northern Nevada oasis that proudly proclaims itself "The Biggest Little City in the World."

So when the Money Tree Casino abruptly locked its doors, posting signs saying "Temporarily Closed," it sent a quiver through this region of heavy dependence on gambling.

It was the latest in a series of puzzling casino closures in Reno, which just a year ago was being touted as another Western-style boom town, another Las Vegas, another Atlantic City.

Major corporations, like MGM, had invested huge sums in Reno's promising future. Hordes were flocking to the eastern Sierra city to get a piece of the action — so many, in fact, that it created a housing shortage.

It is still critical. Some people still live in tents by the Truckee River, waiting for their homes to be built.

The construction boom Is on, but two other downtown Reno casinos have closed in recent weeks, while others are rumored to be in serious financial trouble.

Immediate blame for the current blues is being split between the weather, inflation, and gasoline prices.

Reno overall still has that boom-town tinge.

— Palo Verde Valley TIMES
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Monthly Photo Contest Rules
Each month when entries warrant, Desert Magazine will award $25 for the best black and white photograph submitted. Subject must be desert-related. In the opinion of our judges, none of the entries received by the deadline for our June contest qualified for an award so no prize will be awarded this month. Prize money will be added to next month's winnings, a total of $50 for the lucky winner.

Here Are The Rules
1. Prints must be B&W, 8x10, glossy.
2. Contest is open to amateur and professional. Desert requires first publication rights.
3. Each photograph must be labeled (time, place, shutter speed, film, and camera).
4. Judges are from Desert's staff.
5. Prints will be returned if self-addressed stamped envelope is enclosed.

Address all entries to Photo Editor, Desert Magazine, P.O. Box 1318, Palm Desert, CA 92261.

Listing for Calendar must be received at least three months prior to the event. There is no charge for this service.


May 23-25: Ogden, Utah. "Old Buildings ... Presents from the Past," an idea market for old home owners, sponsored by the Utah Historical Society. (801) 533-6024.

June 5-10: Clovis, New Mexico. June 5-7: 10th annual Pioneer Days & Rodeo. City-wide celebration centered around one of the top 10 rodeos among pro competitors in the U.S.; includes parade and Miss New Mexico Rodeo Pageant (Sat.); $3.00, 8 a.m.-10:30 p.m., county fair grounds. June 8th-10th: 17th annual summer registered horse sale, 10 a.m.-9 p.m., stockyards.


June 12-14: Fort Sumner, New Mexico: 5th Annual Old Fort Days. Parade, barbecue, bank robbery, arts & crafts sidewalk sale, fiddlers' contest, vaudeville skits, bluegrass concert, antique car show, 5/10-mile Billy the Kid Outlaw Run; centered on Main St.

June 13: Sandia, San Ildefonso, Santa Clara & Taos Pueblos: Annual San Antonio Feast Day. Corn Dance (Sandia); various dances.

June 21-29: 21st Annual Prineville Rockhound Pow Wow. For more information, write to: Prineville Rockhound Pow Wow Association, P.O. Box 671, Prineville, OR 97754. (503) 447-6760.

June 27, 28, 29: Lone Pine, Calif., at the foot of Mount Whitney in Owens Valley, will host its homecoming/reunion celebration. All day festivities have been planned for Friday and Saturday including a Golf Tournament, a "Get to Gether" in the Lone Pine Park, a traditional pit style barbecue and dance. For further information, send your name and address to: Lone Pine Reunion, Box 815, Lone Pine, Calif. 93545.

June 28-29: Ventura, Calif. An exotic and spectacular flower show and plant sale with categories of African violets, begonias, bonsai, and fuchsias being exhibited and sold. Place: home arts building, Ventura County Fairgrounds, Ventura, Calif. This will be a judged show. Donation $1.00. Children under 12, free. Free parking on fairgrounds. Hours: 10 to 5 Saturday and Sunday.
BEEF AN' BEANS

By Stella Hughes

The terms “Mexican” and “Spanish” are used almost interchangeably in the Southwest, especially by newcomers to the region and, surprisingly, by many Mexicans themselves. You can’t really blame these pilgrims, drifting to our land of sunshine, for being confused, as Mexicans speak Spanish and reflect quite a bit of Spanish influence in their culture. To the newcomer, Mexican and Spanish are practically synonymous.

So, when you see a restaurant advertising “Spanish” dishes, it’s a sure bet the food served is Mexican or an Americanized version of Mexican. It’s true, Spanish influence is dominant in Mexican cooking but still, Mexican cooking is as different from Spanish as is, say, New England cooking from English.

Thus, the Mexican recipes on this page are presented as Mexican and not Spanish. I wouldn’t recognize a real Spanish dish if I met one in the middle of the road.

The following recipe makes no pretense of being a native Mexican dish, but is a maverick that any amateur can prepare ahead of time and heat before serving while on a camping trip, or on any other occasion when you’re in a hurry.

BEEF AN' BEANS

2 pounds beef cut in 1/2-in pieces
2 tablespoons cooking fat
2 teaspoons salt
1/2 teaspoon pepper
1 can crushed pineapple
2 cans baked beans (16 oz.)
1 can tomato sauce
2 tablespoons brown sugar
1/2 cup chopped onion
1/2 teaspoon dry mustard

Brown beef cubes in cooking fat in Dutch oven or skillet. Pour off drippings. Sprinkle with salt and pepper. Drain crushed pineapple; reserve juice and add to meat. Cover tightly and cook at moderate temperature until done, about 1 hour and 15 minutes. Then stir in pineapple, beans, tomato sauce, brown sugar, minced onion, and mustard, and continue cooking about 10 minutes. Serve over toasted hamburger buns, slices of French bread, pancakes (shown) or flour tortillas. Indian fry bread makes a great “pusher” for this dish and you can serve a side dish of diced green chiles or hot salsa.

Substitute hamburger for beef cubes if you want, and any canned beans of your choice. It's supposed to serve eight, but you better not count on it. I find it feeds five hungry boys, just barely.

A good many years ago, while visiting in Mexico City, I asked our guide where we might find some good Mexican food, meaning of course, what we were used to eating in Arizona. He laughed and said “In Oklahoma City.” Well, you know, he was right.

Mexicans and Southwesterners are not the only people in the world who feel that life could not be endured without dried legumes. New Orleans has its red beans with rice, the Chinese use soy beans, while the Japanese favor bean curd. In Italy it’s both the white and kidney bean, while Middle Europe has its split pea and lentils. And what would Boston be without baked beans?

But in the Southwest, the bean plays a much bigger part in daily life than it does in any place else, except Mexico, and bean means the brown and white speckled kind called pinto. Then, the Southwesterners being beekeepers, it’s only natural for them to marry beef and beans.

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1 cup chopped onion
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Gold

GOLD LOCATIONS OF THE U.S. by Jack Black. Includes Alaska with streams, lodes and placers, production figures, type of gold, locations for the serious amateur who hopes to find enough gold to make a living. Pb., 174 pgs., $6.95.

HOW AND WHERE TO PAN GOLD by Wayne Winters. Gold placers, how to pan, the "wet" processes, amalgamation, the "hows" of claim staking, metal detectors, camping tips for prospectors and miners, and location maps. Pb., 72 pgs., $3.00.

BURIED TREASURE AND LOST MINES by Frank Fish. One of the original treasure hunters provides data on 93 lost bonanzas, many of which he personally searched for. He died under mysterious circumstances in 1968 after leading an adventurous life. Illus. with photos and maps. Pb., 68 pgs., $2.00.

DEAD MEN DO TELL TALES by Lake Erie Schafer. Related to BURIED TREASURE AND LOST MINES by Frank Fish, the author knew Fish for many years and claims he was murdered. Her book adds other information on alleged lost bonanzas, plus reasons she thinks Fish did not die a natural death as stated by the authorities. Pb., Illus., 80 pgs., $5.00.

WHERE TO FIND GOLD IN THE MOTHER LODGE by James Klein. The author is a partner in K & M Mining Explorations Company, which is now developing three gold mining claims. Includes a history of the gold rush, geology of the Mother Lode, where to find gold, county by county, and how to find gold, including information on equipment, panning, dredging, and how to stake a claim. Pb., 121 pgs., $4.95.

WHERE TO FIND GOLD IN THE DESERT by James Klein. Where to find gold in the Rosamond-Mohave area, the El Paso Mountains, Randsburg, and Barstow areas, and many more. Pb., 112 pgs., $4.95.

ELECTRONIC PROSPECTING WITH THE VLF/TR/METAL/MINERAL DETECTOR by Charles Garrett, Bob Grant, and Ray Legall. Handy reference for anyone using late-model metal detectors, written by experts. Contains many hints on how to find gold and other treasures and artifacts with a good bibliography and appendix. Pb., 86 pgs., numerous illus., $4.95.

ROADMAP TO CALIFORNIA'S LOST MINES AND BURIED TREASURES. Compiled by Varna Enterprises, 35" x 25" and scaled. Southern California on one side and Northern California on the other. Contains detailed location of placer names, many of which are not on regular maps. $4.00.

HIGH MOUNTAINS AND DEEP VALLEYS by Lew and Ginny Clark, with photographs by Edwin C. Rockwell. A history and general guide book to the vast lands east of the High Sierra, south of the Comstock Lode, north of the Mojave Desert, and west of Death Valley, by oldtimers who know the area. Pb., 192 pgs., 250 photographs, and many maps. $6.95.

THE WEEK-END GOLD MINER by A. H. Ryan, Ph.D. Chapters on where to look for gold, mining in the desert, maps, ghost towns and lost mines, and what to do if you strike it rich. Pb., 65 pgs., $1.95.

THE WEEK-END TREASURE HUNTER by A. H. Ryan, Ph.D. Book about other forms of treasure such as sunken treasure, hunting gemstones, and also beachcombing, prospecting for gold, and a homemade metal detector. Pb., 80 pgs., $1.95.


GOLD DIGGERS ATLAS by Robert Neill Johnson. Maps showing actual locations where gold has been found. Covers all of the western United States with detailed area maps showing interstate freeways, U.S. highways, state highways, paved and unpaved roads. Pb., 64 pgs., $3.00.

ROOADMAP TO GHOST TOWNS AND MINING CAMPS OF CALIFORNIA. Southern California on one side and Northern California on the other. Detailed location of place names, many of which are not on regular maps. $4.00.


TREASURE HUNTER'S MANUAL NO. 7 by Kurt von Mieller. The most complete, up-to-date guide to America's fastest-growing hobby, written by an old master of treasure hunting. Research techniques, detector operation, legalities and gold dredging. Pb., 299 pgs., $6.95.

LET'S GO PROSPECTING by Eduard Arthur. Learn about minerals and their characteristics, prospecting, descriptions of industrial minerals of California, metallic ores, as well as mineral maps of California. Pb., 80 pgs., $6.50.

LOST MINES AND BURIED TREASURES OF THE WEST, Bibliography and Place Names from Kansas West to California, Oregon, Washington, and Mexico by Thomas Probert. This large, easy-to-use volume lists the works of more than 1,100 different authors, covering thousands of stories of lost mines and buried treasures. An important basic research tool for historians, geologists, geographers, anthropologists and archaeologists. Hb., 593 pgs., $27.50.


TALES OF THE SUPERSTITIONS, The Origins of the Lost Dutchman Legends by Robert Blair. An intriguing account of the fabulous Lost Dutchman. The author turns up new clues and signatures which will prove to be both a setback and a stimulus to the search for the legendary mine. Pb., 175 pgs., $4.95.

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GOLD RUSH COUNTRY by the Editors of Stan- so Books. A revised and updated practical guide to California's Mother Lode country. Divided into geographical areas for easy weekend trips, the 8" x 11" heavy paperback new edition is illustrated with photos and maps. Special features and anecdotes of historical and present-day activities. Pb., 96 pgs., $3.95.

THE GOLD MINES OF CALIFORNIA, TWO GUIDEBOOKS. Fayette Robinson's guidebook, originally written in 1849, is reproduced in this book. Typical of the many books rushed to press to sell to the forty-niners, with its sensational reports of gold discoveries. Franklin Street's 1850 guidebook, the second guidebook reproduced here, more objectively describes each stream and mining camp in the gold country, without the "fake optimism" typical of the 1849 guides. Hb., 225 pgs., $10.00.

GOLDFROCK FACTS AND FOLKTales by iva L. Geisinger. Goldfrock, a rich mining area during the late 1800s, located in the California desert near Yuma, was once home for 2,500 people and a source of millions of dollars' worth of gold ore. Goldfrock's history is detailed here, including the fact that General George S. Patton and his 2nd Armored Division trained for combat in this region. Pb., 65 pgs., $2.25.

GOLD FEVER by Helen E. Wilson. History of the gold mining days in Jarbridge, Nevada, through the lives of persons then living. Illustrated with many old photographs. Pb., 129 pgs., $5.00.

APACHE GOLD and YAQUI SILVER by J. Frank Dobie. Stories of fortune hunters by J. Frank Dobie (1888-1984), a "maverick academician, a natural historian, a folklorist, and above all a storyteller." Dobie wrote 18 books about the Southwest; this one about "a history of what men have believed in — not creeds, but luck, fortune through chance, the fulfillment of hope." Pb., 360 pgs., $4.95.


DEATH VALLEY

INSIDE DEATH VALLEY by Chuck Gebhardt. A new revision of this comprehensive guide and reference text. Information on the accommodations and services, plus an outstanding Entry Guide, with maps of possible routes into the Valley, and a Place Name Index. Includes 70-odd photos of the commonly found points of interest, plants and scenes. An indispensable guide for anyone planning to visit Death Valley. Pb., 166 pgs., $5.95.


EXPLORING DEATH VALLEY by Ruth Kirk. Written by a woman who lived in Death Valley, the hottest desert in the world, for three years while her husband served there as a ranger. Covers forgotten trails on which early prospectors were occasionally found, and a directory section telling where to find metals, lodging, gas stations, campgrounds. Illustrated with over 50 photographs. Pb., 88 pgs., $3.45.

DEATH VALLEY IN '49 by William Levis Manby. Fascinating first-hand account by a leader of a party of 49ers. Details such as the eating of ox blood and intestines. Pb., 498 pgs., $9.95.

Baja California

BYROADS OF BAJA by Walt Wheelock. In addition to describing the many highways now being paved, this veteran Baja explorer also tells of back-country roads leading to Indian ruins, missions, and abandoned mines. Ph., illus., 96 pgs., $1.95.

BAJA CALIFORNIA AND ITS MISSIONS by Tomas Robertson. This book is a must for all those who are interested in the saga of the mission fathers and who may wish to visit those often-forgotten enclaves on the southern tip of the Baja Peninsula. Pb., 96 pgs., illus., with photos and maps, $3.50.

A FIELD GUIDE TO THE COMMON AND INTERESTING PLANTS OF BAJA CALIFORNIA by Jeannette Coyle and Norman Roberts. Illustrated with 250 plants are described with 189 color photos. Includes past and present uses of the plants by aborigines and people in Baja today. Scientific, Spanish, and common names are given. Excellent reference and highly recommended. 224 pgs., Pb., $8.50.
1980 BOOK CATALOG

THE BAJA FEELING by Ben Hunter. Not just another turista invasion book about Baja, but an entertaining and informative report on the trials and tribulations of weekend and full-time homebuilding in Baja California, by a charming writer who admits he doesn’t know everything. A refreshing change! Hb., 334 pgs., photographs and drawings, $10.95.

BAJA CALIFORNIA OVERLAND by L. Burr Belden. Practical guide to Lower California as far as La Paz by a boat with material gleaned from extensive study trip sponsored by Univ. of Calif. Includes things to see and accommodations. Hb., $1.95.

TRAVELS IN THE INTERIOR OF MEXICO: In Baja California and Around the Sea of Cortes, 1825, 1826, 1827 and 1828, by L. R. W. H. Hardy, K.N. An oldie but a goodie, an all-time classic for the library of any Baja buff, written as a journal by one of the first non-Spanish visitors to this wild region. Elegant reprint with all the flavor of the original 150-year-old English edition. Hardy supplied many of the place names still used in this area. Hb., an excellent map, 558 pgs., $20.00.

BAJA CALIFORNIA GUIDEBOOK by Walt Wheelock and Howard E. Gulick, formerly Gerbasi and Gulick’s Lower California Guidebook. This totally revised fifth edition is up-to-the-minute for the Transpeninsular paved highway, with new detailed mileages and descriptive text. Corrections and additions are shown for the many side roads, ORV routes, trails and little-known byways to desert, mountain, beach and bay areas. Folding route maps are in color and newly revised for current accuracy. Indispensable reference guide. Hb., $10.50.

THE CAVE PAINTINGS OF BAJA CALIFORNIA, The Great Murals of an Unknown People by Harry Crosby. A sequel to his THE KING’S HIGHWAY IN BAJA CALIFORNIA, the author presents a tantalizing disclosure of a sweeping panorama of great murals executed by an unknown people in a land which has barely been penetrated by man. Beautifully illustrated with color reproductions of cave paintings and sketches of figures which appear on cave walls in four different mountain ranges. Hb., large format, 174 pgs., $18.50.

THE KING’S HIGHWAY IN BAJA CALIFORNIA by Harry Crosby. A fascinating recounting of a trip by mulch-jack over the rugged spine of the Baja California peninsula, along an historic path yet unmarked by the first Spanish padres. It tells of the life and death of the old Jesuit missions. It describes how the first European settlers were lured into the mountains along the same road. Magnificent photographs, many in color, highlight the book. Hb., 352 pgs., large format, $14.50.

BEACHES OF BAJA by Walt Wheelock. Beaches on the Pacific side of Lower California are described by the veteran Baja explorer. Unlike California beaches, they are still relatively free of crowds. Pb., illus., 72 pgs., $2.50.

CAMP AND CAMINO IN LOWER CALIFORNIA: Explorations and Adventures on the Baja, 1908-1940, by Arthur W. North. A handsome new edition of an old favorite of many Baja California travelers, with new illustrations and all of the author’s original photographs. A classic account of land and sea travels in a raw territory written after travels 70 years ago. Modern writers use North as a starting place. Hb., 130 photographs, 346 pgs., $20.00.

ROUGH RIDING by Dick Copeland and Walt Wheelock. A manual for back country and off-road driving in Baja California. Pb., 56 pgs., $1.00.

TOWNS OF BAJA CALIFORNIA by David Goldbaum. Goldbaum, born in Mexico in 1858, became mayor of Ensenada and an authority on northern Baja California. Originally written in 1910, this is a well-written, town-by-town history of Baja California’s small towns with a foldout facsimile map updated in 1919. Pb., 69 pgs., $2.75.

OFFBEAT BAJA by Jim Hunter. A guide to hidden bays and beaches, islands, and missions, with dirt road classifications rated “1” (easy) to “10” (practically impossible), what to expect in terms of gas, water, shelter, etc. Photographs, maps, bibliography. Pb., 156 pgs., $5.55.

THE BAJA BOOK II by Tom Miller and Elmar Fischers. Highly recommended by Jack Smith, author of GOD AND MR. GOMEZ; Jerry Hulse, Travel Editor of the LA Times; Frank Riley, Spacemaps, with more than 100 illus. Pb., 180 pgs., $8.95.

MEXICO

MEXICO’S WEST COAST BEACHES by Al and Mildred Fischer is an up-to-date guide covering the El Golfo de Santa Clara to the end of the highway at Manzanillo. Excellent reference for the out-of-the-way beaches, in addition to the popular resorts such as Mazatlan and Puerto Vallarta. Although traveling by motorhome, the Fischers also give suggestions for air, auto, ferry, and train travel as well. Pb. well illustrated, 158 pgs., $3.00.

THE PEOPLE’S GUIDE TO MEXICO by Carl Franz. The LA Times says: “For valuable help as well as entertainment...lets you know what a trip to Mexico is really like.” Tips on personal preparation, your car, driving in Mexico, public transportation, hitchhiking, hotels, rentals, camping, economizing, restaurants, foods, markets, stores, cooking, alcohol, services, health, tourism and the law, speaking Spanish, customs, machismo, buying things, red tape, maps, information, and personal anecdotes! Pb., 6” x 9”, 579 pgs., $9.95.

MEXICO GUIDE by Cliff Cross. With 210 maps and 675 photographs, this is a thorough travel guide to Mexico by a man who has travelled there for over 12 years. Pb., 8 1/2” x 11”, 194 pgs., $4.95.

Travel

GRAND CANYON JEEP TRAILS I by Roger Mitchell. Eight interesting trips on the forgotten Shoshone Plateau on the northwest rim of the Grand Canyon are described. A rating system is included to determine how rough a road is before you try it. Much of the material in this book is original research, never having appeared in print before. Pb., amply illustrated with maps and photos, $1.50.

TRACKING DOWN OREGON by Ralph Friedman. An excellent general history of Oregon’s northern neighbor, which has as much desert of a different description plus a lot of sea coast and exciting history. Many photographs of famous people and places and good directions how to get there. Pb., 407 pgs., more than 100 photographs, $6.95.

THE OREGON DESERT by E. R. Jackson and R. A. Long. Filled with both facts and anecdotes, this is the only book on the little but fascinating deserts of Oregon. Anyone who reads it will want to visit the areas — or wish they could. Hb., 407 pgs., $9.95.

WESTERN NEVADA JEEP TRAILS by Roger Mitchell. Many of these 4WD trails have never been described in print before; some unknown even to local residents. All routes require 4WD equipment, and many require some off-road equipment. Pb., illus., maps, $1.00.

INOYO MONO JEEP TRAILS by Roger Mitchell. Excursions ranging from a few hours to a day or two, this book covers the area east of US 95, between the High Sierra and the routes of Death Valley. Many of these trails are left-over from the mining booms of the ’60s and ’80s, some were stage coach roads. Pb., illus., maps, $1.00.

WESTERN SIERRA JEEP TRAILS by Roger Mitchell. Twenty interesting back-country trips easily accessible from California’s great central valley. A rating system is included to determine how difficult a route is before you try it. Pb., illus., maps, $2.50.

EASTERN SIERRA JEEP TRAILS by Roger Mitchell. Covering the area of the eastern fringe of the High Sierra, these are byways and back country routes for the intrepid 4WD enthusiast. Pb., illus., maps, $1.00.

THE NEVADA DESERT by Sessions S. Wheeler. Provides information on Nevada’s state parks, historical monuments, recreational areas and suggestions for safe, comfortable travel in the remote sections of western America. Pb., illus., 168 pgs., $8.95.

THE COMPLEAT NEVADA TRAVELER by David W. Toll. Not the usual guidebook, the author has divided the state into four regions: mining country, Big Bonanza country, cattle country, and Mormon country, with special information on big game hunting, rock-hounding, the Nevada state park system, maps, etc. Toll includes the humorous sidelights of Nevada’s history and its scandalous events, all in a light, readable style. Pb., 278 pgs., $5.95.

HAPPY WANDERER TRIPS by Slim Barnard. Well-known TV personalities Henrietta and Slim
Barnard, put together a selection of their trips and make it a book. Perfect for families planning weekends. Both books are large format, heavy paperback, 150 pgs., each and $2.95 each. Volume 1 covers California and Volume 2 Arizona, Nevada and Mexico. Please state WHICH VOLUME when ordering.

THE BLACK ROCK DESERT by Sessions S. Wheeler. One of Nevada's least-known and most scenic historical desert areas is described by the state's leading professional historian and author. Black Rock is part of the huge Great Desert Basin and was the setting for Indian battles and several tragic incidents during the 1849 Californian Gold Rush. Pb., 186 pgs., many black and white photographs, sketches, and maps, $5.95.

BACK ROADS OF CALIFORNIA by Earl Tholander and the Editors of Sunset Books. Early stagecoach routes, missions, remote canyons, old prospector cabins, mines, cemeteries, etc., are visited as the author travels and sketches California's back roads. Through maps and notes, the traveler is invited to get off the free- ways and see the rural and country lanes throughout the state. Pb., large format, unusually beautiful illustrations, 207 pgs., $6.95.

CALIFORNIA II by David Muench. Text by Don Peterson. Color photographs showing the amazing beauty and mystery of the California landscape. Large, 11" x 14", HB., 191 pgs., $29.50.

CALIFORNIA'S STATE PARKS by Sessions S. Wheeler. A comprehensive handbook for the desert camper. Valuable information on weather conditions, desert vehicles, campsites, food and water requirements, in addition to desert wildlife, minerals, ghost towns, and desert hobbies. Pb., illus., 10 maps, 13 pgs., $3.95.


WILDLIFE/PLANTLIFE

AUDUBON SOCIETY FIELD GUIDE TO NORTH AMERICAN BIRDS by Miklos D. F. Udvardy. Using photographic illustrations rather than paintings or drawings, 508 species are described and 627 beautiful color plates included. An excellent guide with a new functional format. Covered with a sturdy vinyl, 853 pgs., $8.95.

HANDBOOK OF CALIFORNIA BIRDS by Vincent Brown, Henry Weston Jr., and Jenny Buzzell. This second enlarged edition includes facing color plates showing numerous similar-looking birds for comparison at a glance; the names of each bird on each color plate so you can use a field guide or a colored booklet to quickly identify them; new sections on bird courtship in addition to sections on migration, eggs and nest, bird territorial behavior, etc. Pb., beautifully illus., 224 pgs., $7.95.

HOUSE IN THE SUN by George Ohr. A basic desert primer with emphasis on the Colorado Desert of southeastern California and southern Arizona. The author is a local artist associated with his own outstanding color photographs. A site map and other figures. Pb., profusely illus., 234 pgs., $6.95.

DEEP CANYON, A DESERT WILDERNESS. A Naturalist Reflects on the Colorado Desert by Raymond B. Cowles in collaboration with Elna S. Bakker. This book is a first effort to describe for both the informed layman and the general scientist the environ-
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mental relationships of plants, people, and animals in this special area of the Colorado Desert. It is also the first book ever to feature the low-desert photography of incomparable Ansel Adams. Large format, hbd., $12.90.

THE NORTH AMERICAN DESERTS by Edmund C. Jaeger. A long-time authority on all the North American deserts should be carried wherever you travel. It not only describes each of the individual desert areas, but has illustrated sections on desert insects, reptiles, birds, mammals, and plants. 515 pgs., illus., photographs, line drawings, and maps. Hbd., $7.95.


COMMON EDIBLE & USEFUL PLANTS OF THE WEST by Muriel Sweet. A description with drawings of edible (and those not to touch) plants along with how Indians and pioneers used them. Pb., 64 pgs., $2.95.

100 DESERT WILDFLOWERS by Natt Dodge. Each flower is illustrated with a 4-color photograph and described in detail, where found, blooming period, etc. Habitats from sea level to 4,000 feet. Slick pb., 64 pgs., $3.00.

DESERT, The American Southwest by Ruth Kirk. Combining her knowledge of the physical characteristics of the land and man's relation to the desert from the prehistoric past to the present future, with her photographer's eye and enthusiasm for a strange and beautiful country, the result of Ruth Kirk's work is an extraordinarily perceptive account of the living desert. Highly recommended. Hbd., beautifully illus., 354 pgs., $10.00.


100 ROADSIDE WILDFLOWERS by Natt Dodge. A companion book and with the same format as 100 DESERT WILDFLOWERS, this book lists 100 flowers found from 4,000 to 7,000-foot levels. Also has four-color photographs. Slick pb., 64 pgs., $3.00.

DESERT WILD WILDFLOWERS by Edmund C. Jaeger. One of the most complete works ever published on flora of the Southwestern deserts. As easily understood by amateur botanists and travelers as it is informative to the professional. 322 pgs., well illus. $4.95.

CALIFORNIA DESERT WILDFLOWERS by Philip A. Munz. Illustrated with both line drawings and beautiful color photos, and descriptive text by one of the desert's finest botanists. Pb., $3.95.


FIELD GUIDE TO THE INSECTS OF AMERICA NORTH OF MEXICO by Donald J. Borror and Richard E. White. (Peterson Field Guide Series.) This is a definitive reference guide to the insects, who "make up more than half of all the living things on this planet." 88,600 insects are covered by this book, with 1,200 drawings and 142 color paintings. Durable pb., 404 pgs., $5.95. Hbd. edition, 404 pgs., $8.95.


CACTUS AND SUCCULENTS by the Editors of Sunset Books and Sunset Magazine. Beautifully illustrated with many color photographs of cacti, with loss of tips on your care and feeding for your home gardens. Pb., large format, 10-3/4" x 8-1/4", 80 pgs., $2.95.

POISONOUS DWELLERS OF THE DESERT by Natt N. Dodge. Interesting, clearly written, well-illustrated with photographs, this is invaluable for the hiker or other naturalist. Discussions of scorpions, the black widow spider, brown recluse spider, tarantulas, rattlesnakes, back-fanged snakes, and the Gila monster, among others. Pb., 6" x 9", 40 pgs., $1.00.

YOUR DESERT MINE and NINE Paul Stansbury. Coaches Valley history, written by the daughter of "one of the primary forces in the establishment of Coachella's great and unique date industry." Mrs. Shumway and her husband operated one of the valley's best known date gardens. Interesting reading of first-hand history. Hbd., 8-1/4" x 5-1/2", 336 pgs., $10.00.

FIELD GUIDE TO THE BIRDS by Roger Tory Peterson. This guide covers eastern and central American species found north of Mexico, spon- taneous in trail guides. The 410-page book contains 424 easy to read and use maps. Eighteen sections give actual trail descriptions and maps, information about outstanding attractions, possible problems, exact mileages between points, and geological, botanical and biological treatises to be found along the trail. Water-repellent cover, 94 photos, $11.95.

DESOilation Wilderness, A Complete Guide to Over 200 Miles of Trail and 140 Trout Streams and Lakes, by Robert S. Wood. Divided into separate regions, each section constitutes a chapter. The chapter is further divided into sections, and each section is a separate trail. Numerous maps show many miles of trails and cross-country routes not found elsewhere. With this book, even a stranger can find his way with ease through the 150 square miles of California mountain wilderness described. Pb., well illus., $4.95.

SAN BERNARDINO MOUNTAIN TRAILS by John W. Robinson. Easy one-day and more rugged hiking trips into the San Bernardino, San Jacinto, and Santa Rosa Mountains of Southern California. 100 hiking trails are described in detail and illustrated so you will not get lost. Heavy pb., map, 258 pgs., $7.95.

BACK COUNTRY ROADS AND TRAILS, SAN DIEGO COUNTY by Jerry Schad. Concentrating on the mountains and desert of So. California's San Diego County, there are trips to the Palomar Mountains, the Julian area, the Cuyamaca Mountain, Laguna Mountains, the Anza Borrego Desert. Trips reachable by car, bicycle or on foot. Pb., 96 pgs., illus. and photographs, $4.95.

DESSERT HIKING GUIDE by John A. Fleming. A clearly-presented guide, describing 25 day hikes in the Coachella Valley of Southern California, from Palm Springs to the Salton Sea. There is a map for location of each hike, total mileage per hike, given, round trip time, and elevation gain. Pb., 8-1/2" x 5-1/2", 28 pgs., $2.50.

Hiking

BACKPACKING GUIDE TO SAN DIEGO COUNTY by Skip Ralph. An informative, no-nonsense primer to day hiking and extended several-day trips into the Southern California mountain and desert back country, covering maps, trails, current survival technology, etc. Pb., 209 pgs., $5.95.

HIking THE DESERT by Dave Ganci. An invaluable guide for the desert hiker, this book describes the best survival techniques, from what to wear, what to sleep in, what to eat, first aid, etc., pb., 9" x 6", 178 pgs., $6.95.

WILDERNESS MEDICINE by William W. For- gery, M.D. A discussion of medical kits to take along on backpacking or other wilderness expeditions, common ailments, immunization schedules, and a prescription list of ailments and recommended medications for extended trips where medical help is not available. Well-indexed book, with lots of useful and interesting information. Pb., 8-1/2" x 5-1/4", 124 pgs., $5.95 in U.S.A., $6.95 in Canada.

OUTDOOR SURVIVAL SKILLS by Larry Dean Olsen. If you'd like to know how to skin a rattlesnake or dry a ground squirrel in the sun, this book is for you. Gene Shalit of the Today Show says: "Everything from how to make a bow..."
and arrow to recognizing wildflowers to building wooden traps and even using insects as a life-saving source of food. . . a superabundance among paperbacks." This book had to be lived before it could be written. The author's mastery of primitive skills has made him confident that survival living need not be an ordeal once a person learns to adjust. Chapters deal with the use of plants for food and medicine. Buckram cover, well illustrated, 188 pgs., pb., $9 x 6", revised edition boasts of 94 four-color photos added. $4.95.

Ghost Towns

**GHOST TOWNS OF ARIZONA** by James and Barbara Sherman. If you are looking for a ghost town in Arizona, this is your waybill. Illustrated, maps, townships, ranges, co-ordinates, history, and other details make this one of the best ghost town books ever published. Large 9" x 11" format, heavy pb., 208 pgs., $6.95.

**GHOST TOWNS OF THE NORTHWEST** by Norman D. Wells. The ghost-town country of the Pacific Northwest, including trips to many little-known areas, is explored in this first-hand, factual, and interesting book. Excellent photography. Best book to date on ghost towns of the Northwest. Hb., heavy slick paper, 319 pgs. $9.95.

**JEEP TRAILS TO COLORADO GHOST TOWNS** by Robert L. Brown. An illustrated, detailed, informal history of life in the mining camps deep in the almost inaccessible mountain valleys of Colorado Rockies. 58 towns are included as examples of the vigorous struggle for existence in the mining camps of the West. Illus., 239 pgs, end sheet map, pb., $6.95.

**NEVADA GHOST TOWNS AND MINING CAMPS** by Stanley W. Paher. Covering all of Nevada's 17 counties, Paher has documented 575 mining camps, many of which have been erased from the earth. The book contains the greatest and most complete collection of historical photographs of Nevada ever published. This, coupled with his excellent writing and maps, creates a book of lasting value. Large format, 700 photographs, hb., 492 pgs., $25.00.

**HELLDORADOS, GHOST AND MINING CAMPS OF THE OLD SOUTHWEST** by Norman D. Wells. The skeletal remains of abandoned mines and towns in the Cebor mountains and other western Arizona along the Colorado River are visited by the author. One edition is available: the standard edition in a large format pb., lavishly illus. with rare old photos. $2.95.

**COLORADO RIVER GHOST TOWNS** by Stanley W. Paher. The skeletal remains of abandoned mines and towns in the Cebor mountains and other western Arizona along the Colorado River are visited by the author. One edition is available: the standard edition in a large format pb., lavishly illus. with rare old photos. $2.95.

**CALIFORNIA GHOST TOWN TRAILS** by Wayne Sparking. Eighty-four ghost towns are described, along with the history and highlights of each. The author has visited these sites by pick-up, 4WD, and by foot. Ninety-five photographs accompany the text, and maps detail the location of the camps. An excellent reference to add to the libraries of those fascinated by western history. Pb., 135 pgs., $3.95.

**THE HISTORICAL GUIDE TO UTAH GHOST TOWNS** by Saben L. Carr. This guide lists in geographical order by counties, gives an historical summary, defines locations, and describes with maps and photographs more than 150 ghost towns. Ninety-five photographs are included as well as an abundance of maps. Large format, pb., 166 pgs., $5.95.

**GHOST TOWNS OF THE COLORADO ROCKIES** by Robert L. Brown. Written by the author of JEEP TRAILS TO COLORADO GHOST TOWNS, this book deals with ghost towns accessible by passenger car. Gives directions and maps for finding the equipment needed at home. An excellent publication and highly recommended for the homemaker, camp cook or the expedition leader. Pb., well illus., $4.95.

**MINING CAMPS AND GHOST TOWNS, A HISTORY OF MINING IN ARIZONA BY Frank Lackey. Dramatic history of the mineral frontier as it affected one section of the vast American west, the Lower Colorado Region. Illus., hb., 192 pgs., $7.95.

**GHOST TOWNS OF THE CENTRAL MOJAVE** by Mike Brown. Thirty-six photographs showing some of the old towns as they appear today, not too many years ago. Thirty maps with detailed mileage to the ghost towns, shown to the tenth of a mile. Interesting and historical data for treasure hunters, rockhounds, bottle collectors, and western-lure enthusiasts. Pb., $2.95.

**SOURDOUGH COOKBOOK** by Don and Myrtle Holm. How to make sourdough starter and many dozens of sourdough recipes, plus amusing anecdotes by the authors of the popular OLD-FASHIONED DUTCH OVEN COOKBOOK. A new experience in culinary adventures. Pb., 136 slick pgs., illus., $4.95.

**CALIFORNIA FIVE-IN-ONE COOKBOOK** by Al and Mildred Fischer. Recipes divided into Early California (Indian, Mexican, Mission, Gold
RUSH), California Fruits (Citrus,Dates, Avocados, etc.), California Products (Honey, Rice, Beef, etc.), Sea Foods and Wine Cooking. A total of 19 unusual recipes, spiral-bound, 142 pgs., $3.00.

ARIZONA COOK BOOK by Al and Mildred Fisher. This fascinating and unusual cook book includes chapter on food preservation. Pb., spiral-bound, 127 pgs., $2.00.

DE GRAZIA AND MEXICAN COOKERY. Illus. by De Grazia; Text by Spencer Gill. A beautiful all four-color publication showing the intriguing designs of the masters of the Indian pottery makers of the American Southwest. You will learn of clays and colors and the traditional methods of handforming, finishing, and firing. Large format, Pb., $7.95.

AMERICAN INDIAN FOOD AND LORE by Carolyn Neithammer. The original Indian plants used for foods, medicinal purposes, shelter, clothing, etc., are described in detail in this fascinating book. Common and scientific names, plus descriptions of each plant and unusual recipes. Large format, profusely illus., 191 pgs., $5.95.

NAVOJO RUGS, Past, Present and Future by Gilbert S. Maxwell. Concerns the history, legends, and descriptions of Navajo rugs. Full color photographs, Pb., $3.75.

POTTERY TREASURES, The Splendor of Southwest Indian Art, Photography by Jerry Jackson; Text by Spencer Gill. A beautiful all four-color publication showing the intriguing designs of the masters of the Indian pottery makers of the American Southwest. You will learn of clays and colors and the traditional methods of handforming, finishing, and firing. Large format, Pb., $9.95.

TURQUOISE, The Gem of the Centuries by Oscar T. Branson. The most complete and lavishly illustrated all-color book on turquoise. Identifies 45 localities, treated and stabilized material, gives brief history of the gem, and details the individual techniques of the southwest Indian Tribes. Heavy Pb., large format, 68 pgs., $7.95.

HOW TO DO PERMANENT SANDPAINTING by David and Jean Villasenor. Instructions for the permanent adaptation of this age-old ephemeral art of the Indians of the Greater Southwest is given, including where to find the materials, preparation, how to color sand artificially, making and transferring patterns, etc. Also gives descriptions and meanings of the various Indian signs used. Well illus., Pb., 34 pgs., $3.00.

INDIAN JEWELRY MAKING, Vol. I, by Oscar T. Branson. This book is intended as a step-by-step how-to-do-it method of making jewelry. An intriguing all-color publication that is an asset to the consumer as well as to the producer of Indian jewelry today because it provides the basic knowledge of how jewelry is made so one can judge if it is well made and basically good design. Large format, Pb., $7.95.


ROCK DRAWINGS OF THE COSO RANGE by Campbell Grant, James Baird, and J. Kenneth Brininstool. A Mammargo Museum publication, this book tells of sites of rock art in the Coso Range, which, at 4,000 feet, merges with the flatlands of the northern Mojave Desert. Illus., detailed drawings, maps, 144 pgs., $5.75.

THE CREATIVE OJO BOOK by Diane Thomas. Instructions for making the colorful yarn tassels originally made by Pueblo and Mexican Indians. Included are directions for wall-hangings, ojos, necklaces, mobilies, and gift-wrap tie-ons. Well illus. with 4-color photographs. 52 pgs., Pb., $2.95.


SOUTHWEST INDIAN CRAFT ARTS by Clara Lee Tawney. One of the best introductions to the Indian pottery makers of the United States. A fascinating true story of the author's marriages to anthropologist John Peabody Harrington, the "angry god" to the Hopi, and to the remarkable Chemehuevi Indian, George Laird. The appeal of this amazing memoir is so broad it has drawn rave reviews throughout the country and is being hailed as a classic. Pb., 230 pgs., $10.00.

THE ETHNO-BOTANY OF THE CAHUILLA INDIANS OF SOUTHERN CALIFORNIA by David Prescott Barrows. Although basically a study of plants used by the Cahuilla Indians, Barrows' fascinating work is rich in material of interest to the historian, anthropologist, botanist, geographer, and lay reader. Special introduction by Harvey Lawson, Lowell John Bean, and William Bright. Pb., 129 pgs., $5.95.

TEMAPAKI by Lowell John Bean and Katherine Siva Saubel. Temapaki means "from the earth" in Cahuilla, and covers the many uses of plants used for food, medicine, and rituals, plus those used in the manufacturing of baskets, clothing, and painting tools for dwellings. Makes for a better understanding of environmental and cultural relationships. Well illus., 225 pgs., Pb., $10.00.

FORKED TONGUES AND BROKEN TREATIES Edited by Donald E. Worcester. This book gives us a better understanding of the unequal struggle of native against immigrant while our nation was being explored and settled. Profusely illustrated with excellent photos, a "must" reference for historians, students, li-
ARTIFACTS OF THE AMERICAN SOUTH-WEST: Porno, Yurok, Pima and Navajo Baskets, by book that both illustrates and describes Indian artifacts of the Southwest, it is a valuable guide to both scholars and general readers. With glossary, maps, index, place-name index, and appendices on language and cartography. Beautifully illus., 349 pgs., $8.95; Hb., $15.00.

THE LAND OF POCO TIEMPO: by Charles F. Lumis. A reprint of the famous writer and historian of his adventures among the Indians of New Mexico. Lumnis was one of the foremost writers of the West., Pb., 236 pgs., $3.95.

MONTANA MAGAZINE: go on to go on to say that James’s “dramatic description of their history and culture, their ceremonial life, and their highly poetic and broadly cosmic folklore ably supports his thesis that they are a proud, intelligent people.” Interesting reading, including a chapter on Helen Hunt Jackson’s novel Ramona. Photographic illustrations, bibliography. Pb., 185 pgs., $6.50.

GEMS & MINERALS: Chrysler Baskets, by Oscar T. Branson. People all over the world have made and used fetishes since the beginning of time. Author Branson, using the same beautiful, all-color format as his TURQUOISE, THE GEM OF THE CENTURY, describes and illustrates the fetishes used by the Indian tribes of the Southwest. Large format, 64 pages, $7.95.

WESTERN GEM HUNTERS ATLAS: by C.

MINING: by Darold J. Simpson. Field guide for rockhounds with 40 maps and 65 locations. 88 pgs., profusely illus. $4.00.

LONELY DIGGINGS: by Frank S. Wedertz. A highly readable and accurate account of one of California’s almost forgotten corners by a member of the pioneering family that set the setting for some of the most interesting, if generally not overly-productive gold mining operations, in state history. Bodie and Mono Lake are perhaps the best known points in modern times. Pb., 256 pgs., $9.95.

MINES OF THE SAN GABRIEL: by John W. Robinson. Various districts are described such as the San Bernardino, and the Santa Anita placers, the gold mines of the Soledad region and Little Creek, as well as the lode mines on the upper San Gabriel River and on the slopes of Mt. Baldy. Los Angeles County ranks among the top gold producers in the state, and all of it comes from the San Gabriels. Pb., illus., 72 pgs., $2.50.

MINES OF THE SAN BERNARDINO: by John W. Robinson. The largest gold rush in the southern regions of the Golden State took place in the San Bernardino mountains. John tells of this and many other strikes that led to the opening of this high wooded area. Pb., illus., 72 pgs., $2.50.

FROM THIS MOUNTAIN, CERRO GORDO: by Robert G. Isles and Glenn H. Deedeker. The story of those mines located on the eastern slope of the great Sierra Nevadas and in the arid stretches of the Inyo Mountains. Included are stories of mystery mines, such as the Lost Gunsight and the Lost Cement. Photos, Pb., 72 pgs., $2.50.

MINES OF THE EASTERN SIERRA: by Mary Frances Strong. A popular field guide for both amateur and veteran rockhounds and back country explorers; covers the gems and minerals of the Mojave and Colorado Deserts. Heavy Pb., 80 pgs., $2.50.

MINES OF THE HIGH DESERT: by Ronald Dean Miller. Author Miller knew both the country side of the High Desert and the men who were responsible for the development of the mines of the High Desert. Here are stories of the Dale District never told before, with many early as well as contemporary photographs of the mines included. Pb., $2.50.

MINES OF JULIAN: by Helen Ellsberg. Facts and lore of the bygone mining days when Julian, in southwestern California, was reported to have produced some seven million dollars of bullion. Pb., well illus., $2.50.

MINES OF THE GREAT SOUTHWEST: by John D. Mitchell. Includes the true tale of “The Seven Cities of Cibola,” the “Lost Sopori Mine,” the lost “Peg-Leg” mine, the lost “Square Mine,” the lost “Yuma” mine, the lost “Dutch-
History

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DESSERT MAGAZINE BOOK SHOP
Blistening heat of the kind that tests our courage on white hot car handles and defeats arsenals of ice cubes, air conditioners, and swimming pools is prime time for some remarkable desert insects. As we collapse into dappled siestas, cicadas chorus a monotonous song so loud the silence roars when they stop. Often numbering in the millions, individual cicadas in immense swarms are responsible for this din.

The deafening buzz or hum we hear is an insect love song sung by males to attract a mate. By human standards, insect ears are an insect love song sung by males to attract its females. The cicada, on its forelegs; the cicada, on its abdomen. The sound making chambers are immediately next to the ears. Each is a kind of drum with a membranous structure that snapps in and out 200-500 times per second. We imitate the action when we snap a tin aspirin box or push the metal flap on a child’s toy “cricket.”

Because our ears can’t distinguish the individual cicada snaps or clicks, we hear a continuous hum. The female cicada, however, hears each pulse of sound and recognizes a male of her species by the number of pulses she receives per second.

The pulse rate depends on the temperature. Insects are “cold-blooded” which means their metabolic rate is controlled by the temperature of their surroundings. The rate is slower when it’s cooler, faster when it’s warmer. On a hot desert afternoon, male cicadas sing at a fixed speed and females receive at the same rate. Were we to cool the female artificially so her body adjusted to a slower rate, she would not recognize the “right” male.

Male cicadas have a special muscle with which they protect their own ears from the deafening sound they produce. This sound seems to have other advantages besides attracting females. The loud noise of the swarm may repel birds, the cicada’s chief predators. It seems that it may also confuse predatory birds by jamming their communications. Individual cicadas buzz at birds that chase or seize them, which causes some birds to let go.

The other threat to the cicada is the king hornet or cicada killer, a wasp second in size only to the great Pepsis wasps, or tarantula hawks. These wasps sting not to kill but to paralyze, but they themselves don’t eat the cicadas. To insure the survival of its young, the wasp provisions each of her burrows with a paralyzed cicada on which she deposits an egg. The grub hatches and then consumes the living host before it enters the larval stage on its own way to adulthood.

The cicada killer is an inch long, but its prey is much larger, from one and a half to two inches. This presents a transportation problem to the wasp. She has attacked the cicada high in a tree but delivered the death blow on the ground, usually far from her burrow. Lift-off is impossible because the cicada weighs more than the wasp. Rather than dragging it the whole way, the wasp hauls it several feet up a tree or tall weed, straddles it, and then flies off with her powerful wings.

As cruel as this encounter seems, nature’s purpose is well served. The cicada swarm is so numerous that most individuals escape predation, and the cicada is so large that one is usually enough to supply each wasp burrow. Males, not egg-laying females, are taken by cicada killers since it is the male’s song that attracts the wasp. Furthermore, adult cicadas live at most a few weeks, so they’d soon die anyway. Their short adult phase explains why we hear this insect for such brief periods each year.

But this is by no means the whole cicada story. Before adults engage in their raucous serenade, they lead solitary, silent lives. Practically all of this insect’s youthful life is spent underground. The span in the desert is but two to three years but elsewhere, it can be as long as 13 to 17 years.

Thus, years before the summer’s chorus begins, mated females have laid eggs on twigs. These have hatched within a week and the young have dropped to the ground and burrowed in. There they have fed on sap from roots and continued to dig to a depth of five to six feet. Their solitary lives proceed until some mysterious inner clock signals the time of emergence. Simultaneously, thousands of cicada larva tunnel upward to the air and crawl up trees and bushes where they undergo transformation to winged adults within hours. Emergence almost always happens on the same night, or at most over two to three nights, although the eggs were laid over a period of weeks two to three or more years earlier. No one knows why this happens.

With the cicada’s song, the cycle begins again. Their humming is not as melodious as the cricket’s, which is usually produced by rubbing together wings with file and tooth areas. The cricket’s singing is called stridulation (from the same root as the adjective strident) and is also a series of rapid pulses indistinguishable to human ears.

Cicadas never fly when their body temperature is below about 72° F and they maintain full motor control to 116° F. On hotter desert days, they sit on the shaded side of plants, enjoying the microclimate created by a leaf or branch. Their preference for the crudest heat probably provides another advantage which is that most predators are just too pooped to hunt at midday.

Insects have been singing their songs for millions of years primarily to declare their presence, find mates, and reproduce their kind. Since they are tone deaf, they can’t hear themselves as we hear them. And since we are “pulse-deaf,” we can’t hear them as they hear themselves.

Among the many animals on exhibit at the Living Desert Reserve are insects and spiders native to our desert. Each has a story as individual and remarkable as the cicada’s. Visit the Reserve daily, from 9:00 a.m. to 5:00 p.m. at 47-900 South Portola Avenue in Palm Desert, Calif.
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