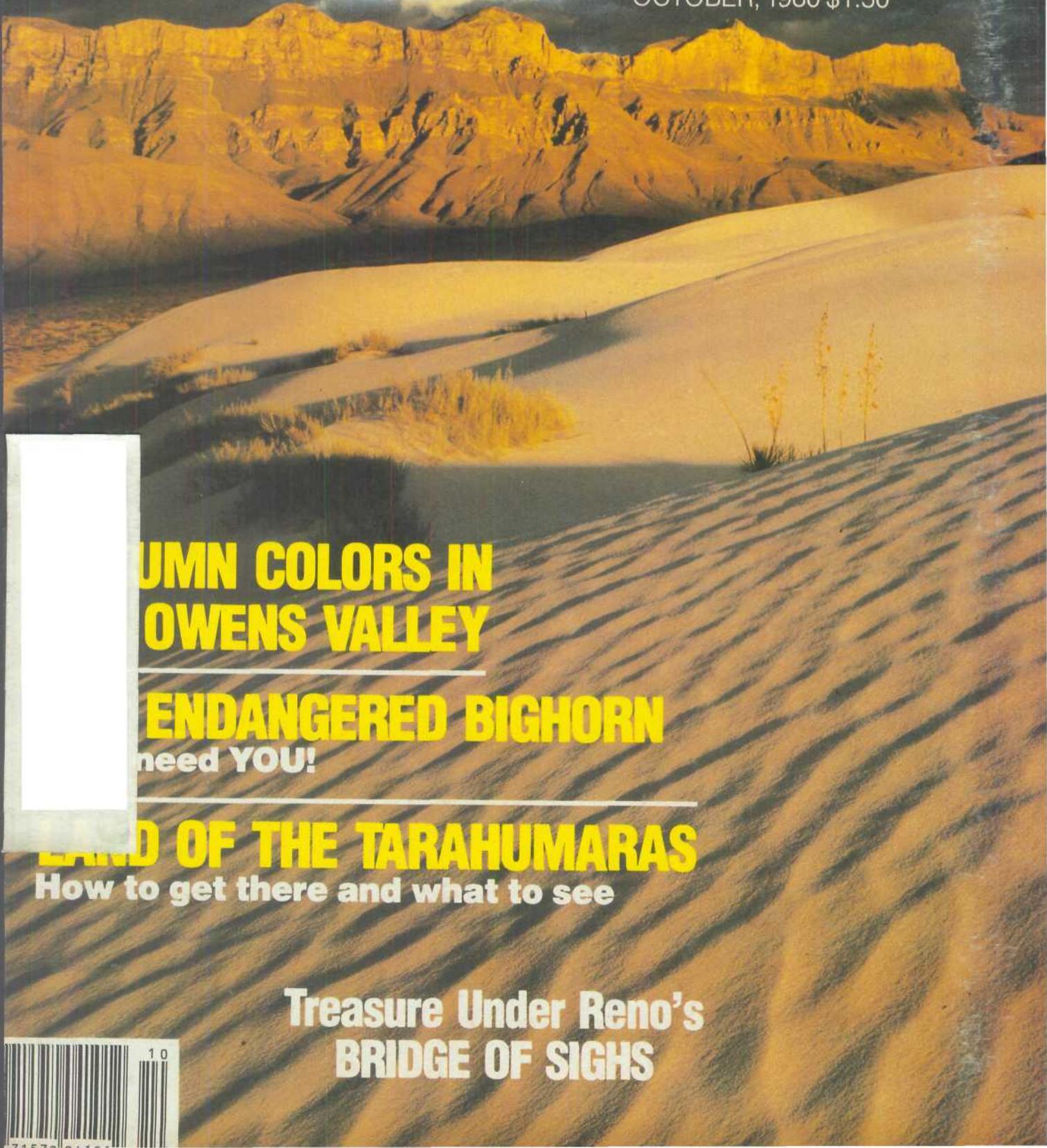


Desert

OCTOBER, 1980 \$1.50



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"Then springs burst forth upon the earth at your command!" —Habakkuk 3:9

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David Muench captures the latticed pattern of the gypsum dunes in Guadalupe Mountain National Park, Texas.



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Editor

Donald MacDonald
Art Director/Photo Editor

Thomas Threinen
Production Director

Barry Berg
Managing Editor

Mary E. Twyman

Ass't. Managing Editor

Pat J. Williams

Staff Photographer

Guy Motil

Art Associate

Jane Dixel

Contributing Editors

Karen Sausman, Natural Sciences
Wayne P. Armstrong, Natural Sciences
Jerry and Luisa Klink, Baja California
Merle H. Graffam, Cartographer

Production Assistance

Jan Garland

Arlene Smith

Special Services

Doug Bunting

Publisher

Donald MacDonald

Associate Publisher/Advertising Director

Daniel D. Whedon

Advertising Services

Kathy Krahenbuhl

Marketing Director

George E. Sector

Subscription Fulfillment

Gloria Smith

Business Manager

Marjorie Moline

Counsel

Chester M. Ross

Represented by

National Advertising Sales, Inc.

Robert E. Leyburn, Pres.
James R. Lytle, Gen'l Mgr.

750 Third Ave., 29th Floor
New York, NY 10017
(212) 682-7483

Robert L. Sarra, II, Reg. Mgr.
435 N. Michigan Ave., Suite 1314
Chicago, IL 60611
(312) 467-6240

Richard F. Landy, Reg. Mgr.
1680 Vine St., Suite 909
Los Angeles, CA 90028
(213) 466-7717

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EDITORIAL

"Welcome" to the United States

THE SCENE AS you sit waiting for the exasperatingly slow lines to move you from Tijuana past one of the eighteen inspection booths and into the country of your birth, "the land of the free and the brave," is a sea of cars, any time of the day and any day of the week, most all containing equally exasperated fellow citizens.

Then off to the left, if you are on that edge of this sea, you can see the two lanes and two booths of the Mexican officials waving cars entering their country past at twenty miles per hour. You inevitably compare this with your own progress which is maybe, at best, one car length per minute. Obviously, just about the same number of visitors who speed through the two Mexican lanes eventually leave through the eighteen manned by officials of the U.S. Customs and Immigration Services.

And this same scene is mirrored with less density at Juarez, Nogales, Tecate and points in between. The Tijuana-San Ysidro crossing, however, is the world's busiest, averaging 100,000 vehicles each weekday and 150,000 on weekends and holidays. And too, all of the people in those vehicles see a sign reading "Welcome to the United States" which was put there only within the last decade at the personal behest of Mrs. Richard M. Nixon. Undoubtedly, she had sat limply in these same lines years ago when she was the young wife of an aspiring lawyer with Mexican connections.

The interminable delays, which are sometimes arbitrarily lengthened, and the attitude, ranging from tired indifference to outright discourtesy, of your uniformed fellow citizens, persons whom your tax dollars support, who subject you to suspicious scrutiny as you return to your country, somehow do not reflect the tenets upon which this nation was founded.

Estimates (*Desert*, November 1979) indicate that 50,000 "illegal" aliens cross our border each month at Tijuana alone and when you deduct those that are caught and sent back, sometimes repeatedly, there is a net annual increase in the U.S. population of 480,000 people from this one source. It might be a fair assumption, considering this volume of traffic, that every Mexican national who is sufficiently motivated can, without too much trouble, enter this country and take up residence despite the degree of surveillance practiced today.

Looked at another way, a minimum each year of 36,500,000 U.S. citizens are

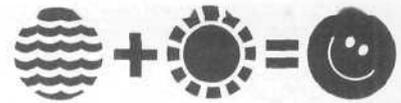
subjected to an unpleasant experience at the Tijuana-San Ysidro crossing to protect us against an unknown additional number of Mexicans who would emigrate here if there were no restrictions. My thought is that the numbers who come anyway would not swell appreciably, except perhaps seasonally for the harvest.

Of course, there is the problem of narcotics and other undesirable contraband which is why the border crossings are manned interchangeably by personnel from both the Customs and Immigration Services, along with a sprinkling of Public Health and Department of Agriculture inspectors. The record, however, of cracking major smuggling rings by evidence seized at official border crossing points is rather dismal. These criminals are more sophisticated than that, and so is their detection. What delays you and I, and what prompts the glowering scrutiny, is the State of California's preoccupation with being cheated out of its tax on a few bottles of liquor or six-packs of beer.

When one compares the economic havoc wrought by delaying 100,000 people an average of an hour each day of the year, not to mention the emotional stress or the waste of gasoline from idling engines, the taxes to be lost by ignoring personal importations would seem insignificant. And added to *your* man-hours wasted is the loss to the Mexicans from the default of people who've found it's simply not worth the effort to go to Tijuana, or Juarez, or Nogales for a Saturday afternoon, or perhaps, further into the interior for a weekend at a resort.

From what I've been able to learn, inspection personnel place much reliance on random tactics. For example, it is the option of the individual in the booth to open every trunk and peer under every hood, or just do so to every tenth or twentieth or whatever vehicle. Or he or she can develop a system of his or her own, such as giving extra attention to only yellow cars, or cars driven by red-headed women. The object is to instill fear, or respect, whichever, but the result is harassment of innocent individuals who happen to be driving the tenth car, or a yellow one, or have red hair. If that has happened to you, why don't you tell your congressman about it? Tell him you're mad — damn mad!

Don Mac Donald



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LETTERS

WHERE ARE THE PAINTINGS?

Luisa Porter-Klink's article "Cave Paintings of Baja" (*Desert*, April 1980) says: "Additionally, there are painted caves located nearer the highway in the Mulege region, and at least one small cave as far north as Santa Inez and Catavina, just one kilometer from the paved highway in a boulder-strewn country of spectacular plant life." I want to see some of these paintings, but we'll be walking anywhere away from the paved highway and in all my readings thus far, I have yet to see specific directions as to how to find these caves.

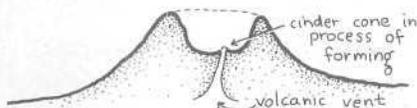
Judith Davison
Livermore, Calif.

Our map (below) showing most of the better-known caves may help you. It's essential that you hire a local guide, and mules, to find your way to most of the sites. The trails tend to get relocated after seasonal storms and there are very few landmarks, man made at least.



PEGLEG GOLD VOLCANIC?

Scientists tell us that a small cinder cone is forming on the floor of the huge crater which is the interior of Mt. St. Helens. A cut-away view would show the volcano like this:



Now, Ken Marquiss in a 1964 article in your magazine described the Pegleg site as a "crater-like valley, well over three-quarters of a mile across." On the floor of this valley, he continued, there is a

small volcanic cone "plugged with rock almost to the top." To the west there is a small butte-shaped knoll.

Mr. Pegleg's description concurs and he adds that the distance between the cone and the knoll is sixty yards. To a *Desert* reader's question whether there is igneous rock nearby, Pegleg guardedly replied that "there is volcanic activity or formations in the area." So, I believe that volcanic activity is the source of Mr. Pegleg's black gold, not a raid on a Peralta-era mule train.

Rich Hill in Arizona, discovered by Pauline Weaver and a Major Peeples over a century ago, may be this type of gold-spewing cone. This hill produced millions in gold nuggets. The top is described as a little basin or depression similar to the nearly rock-filled summit of the Mr. Pegleg hill, and only in the gullies on the side of Rich Hill which connected to the summit was gold found. In the gullies which did not, no gold was found. This suggests, of course, that the gold came from within the hill, exiting through the volcanic vent at the summit.

If Choral Pepper and/or others seek the black Pegleg gold by following ancient pack-train trails, they may find gold but it will be a case of serendipity, and not because they understand the origin of the gold in question. I wish them luck!

Jerry Connelly
Arcadia, Calif.

We suspect that Choral and/or others will come back at you and ask how the gold would withstand the temperatures involved in being spewed out during volcanic activity and still emerge some distance away in nugget form? The fact is, whatever their origin, it did survive which brings us to a commercial announcement.

Eight of Pegleg's nuggets have been returned to the magazine and are now on display at our offices along with the largest selection of western books and art this side of Brawley. The latter are for sale, the nuggets are not. Our address is 74-425 Highway 111 near Deep Canyon Rd. in Palm Desert, Calif.: hours, 9 a.m. to 5 p.m. weekdays.

THE PRICE OF PUBLICITY

Often, a detailed description of the location of an attraction is just a tip-off to the idiots that rush to it and then tear it up so that others are denied the pleasure of seeing it. I recall an instance where the "Bible Shrine" near our area was written up in *Desert*. We went to see it the next weekend and found the rock altar the bible was on had been smashed to rubble, the glass over the bible had been smashed, and

the bible taken and torn up!

Mary K. Thoms
Ridgecrest, Calif.

What can we say? Attractions such as this need visitors for without them, there would be no "donations." However, it is doubtful if vandals study magazines to find their next target. It most often is an impulsive act against which there is no practical protection.

QUACK LIKE A CICADA

Your article on the cicada (*Desert*, June 1980) reminds me of an experience which well illustrates the carrying quality and persistence of this insect's song.

Way back in 1940 we visited the old Chaffin Ranch (now under Lake Powell) on the Colorado River. We were entertained four hours by young Chaffin (where is he now?), a boy of ten years or so with his BB gun. He could spot those noisy cicadas high in the orchard trees and shoot them down with one shot. (Well, maybe after a couple of close practice shots).

Though stunned, the little beasties never missed more than a couple of beats, and were quickly pounced on by one of the farm ducks waiting in expectant confusion below. Swallowed whole with their noisemakers intact, the now invisible cicadas continued their song in undiminished volume. The smiling ducks would prance around for 10 or 15 seconds, seemingly amazed at their new-style quack, until the cicada finally succumbed somewhere down in their innards.

John Southworth
Burbank, Calif.

RELOCATED MOUNTAINS

Contrary to what is reported in your article on the Cadiz Dunes (*Desert*, July 1980), the Sheephole and Calumet Mountains are west, not east, of Cadiz Lake.

A. J. Smatko, M.D.
Santa Monica, Calif.

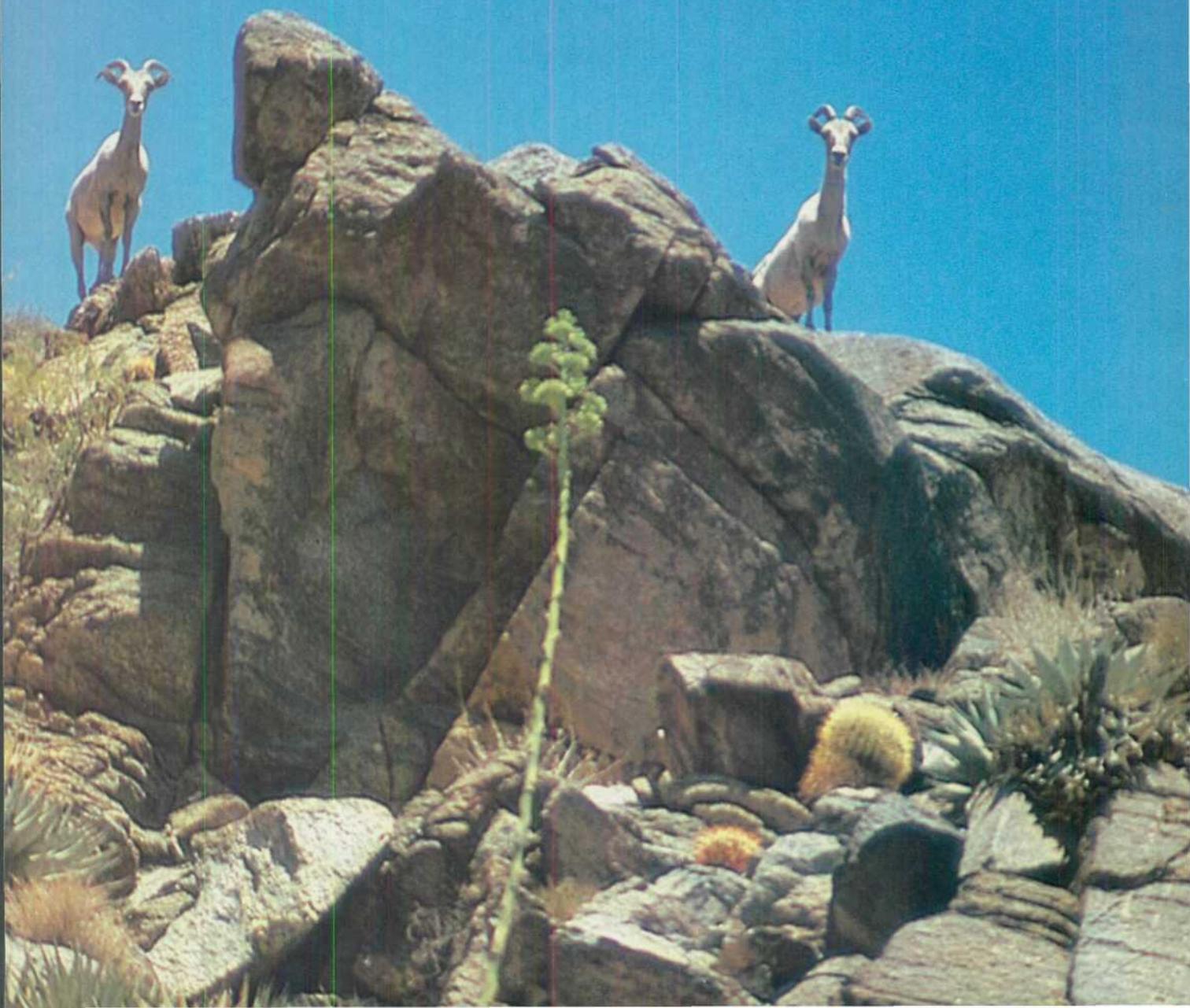
Author John Frye works for the Bureau of Land Management and that organization has been known to move mountains.

The editors of *Desert Magazine* welcome the experiences and opinions of readers and will publish as many letters as space permits. They should be addressed to us at P.O. Box 1318, Palm Desert, CA 92261. No unsigned letters will be considered, but names will be withheld upon request. Please be brief; otherwise, we cannot guarantee to print your letter in its entirety.

the very rare bighorns in California had now been removed from the population.

Scientists and the California State Department of Fish and Game recognize three different subspecies of bighorn sheep within the State: California bighorn, desert bighorn and peninsular bighorn. By far the most rare is the California bighorn (*Ovis canadensis californiana*) of which there are probably no more than 350 individuals in the wild — 250 in wild herds and another 100 that have been brought to the state from

British Columbia to be transplanted into the range. These animals are found in the Sierra Nevadas and in the far northeastern corner of the state near Lassen. The second subspecies of bighorn sheep in California are the desert bighorn (*Ovis canadensis nelsoni*), which are found in the desert ranges in the central portion of the state. Perhaps as many as 2,700 of these animals still survive. The final type are known as peninsular bighorn (*Ovis canadensis cremnobates*). The peninsular subspecies is found from the San Jacinto Mountains south



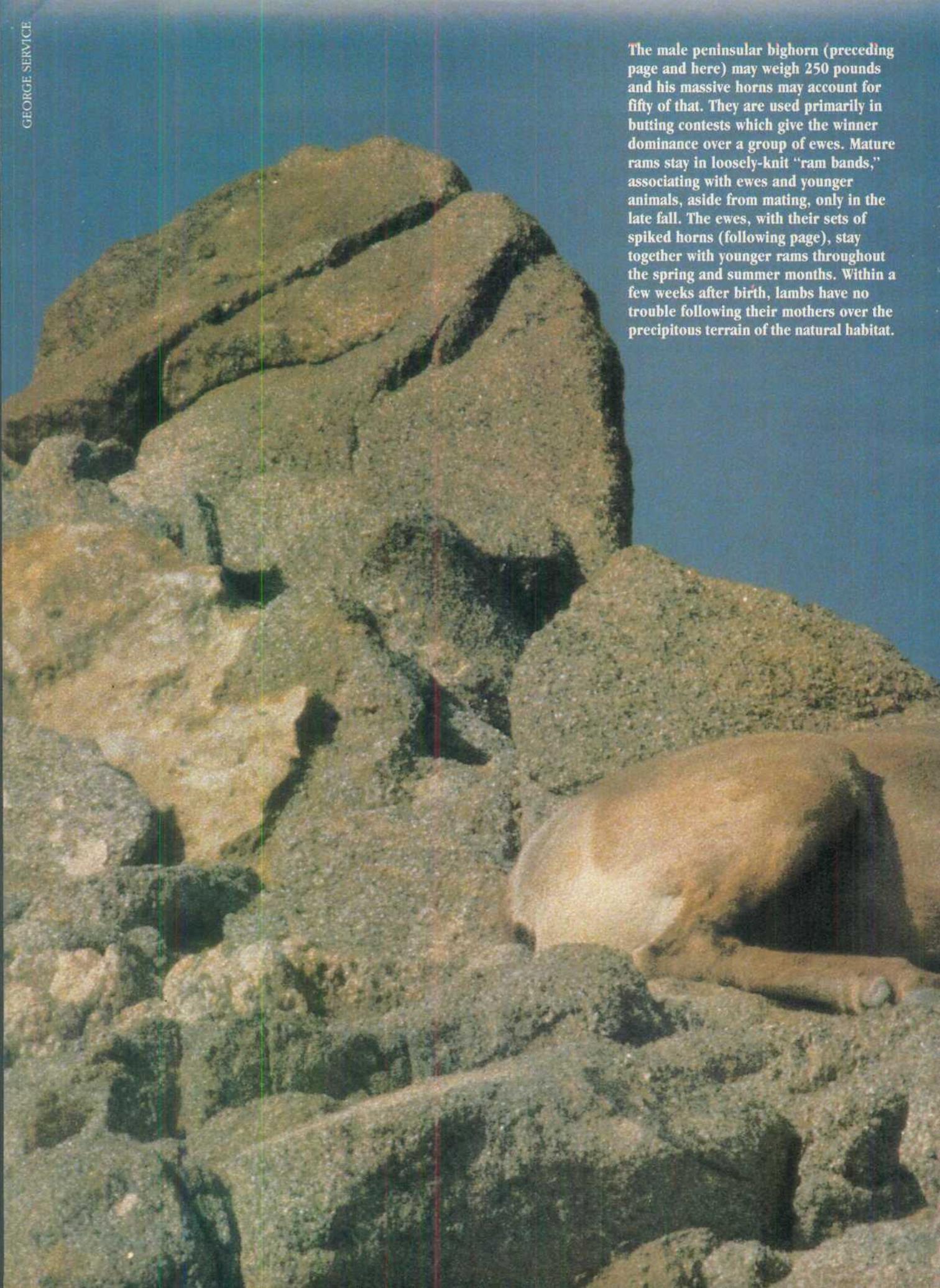
The Endangered

BIGHORN



by **KAREN SAUSMAN**

GEORGE SERVICE

A male peninsular bighorn sheep is shown resting on a large, craggy rock formation. The sheep is positioned in the lower right foreground, lying down with its head tucked. The rock is a mix of grey and brownish tones, with some areas appearing more weathered or moss-covered. The background is a clear, bright blue sky. The overall scene is a natural, rugged habitat.

The male peninsular bighorn (preceding page and here) may weigh 250 pounds and his massive horns may account for fifty of that. They are used primarily in butting contests which give the winner dominance over a group of ewes. Mature rams stay in loosely-knit "ram bands," associating with ewes and younger animals, aside from mating, only in the late fall. The ewes, with their sets of spiked horns (following page), stay together with younger rams throughout the spring and summer months. Within a few weeks after birth, lambs have no trouble following their mothers over the precipitous terrain of the natural habitat.

I was on my way to work, driving down the switchbacks on Highway 74 which winds through the Santa Rosa Mountains in the desert of Southern California. As I swung around a corner I saw the body of a bighorn which apparently had been hit. She was a mature, very healthy looking ewe, apparently until her accident in

prime condition. She had misjudged the speeding traffic on the highway. Whoever hit her hadn't even bothered to stop, although colliding with an animal that weighed at least 125 pounds must have been a very jarring experience. Why the person didn't stop we'll never know; what was obvious was that another individual of



through the Santa Rosa Mountains and through most of the mountain ranges in Anza Borrego Desert State Park and south into Baja California's Sierra San Pedro Martir. Within the state there are possibly up to as many as 1,000 peninsular bighorn. The Santa Rosa Mountains, in recent years, supported probably the largest population of peninsular bighorn sheep in the United States — an estimated 500 individuals. As of today there was one less.

All subspecies of bighorn sheep have been fully protected in the State of California since 1873 and since 1972, they have been considered *Rare* by the California Fish and Game Commission. With over 100 years of protected status, it would be easy to feel that bighorn sheep are safe in the State of California; however, sadly, this is not the case. Even though they have been accorded full protection, the California bighorn has disappeared from all of northeastern California including Modoc and Lassen Counties as well as in both the northern and southern ends of the Sierra Nevada range and all of Ventura County. Indeed, there are only two free-ranging herds of California bighorn, made up of approximately 250 individuals, left in the central part of the Sierra Nevadas near Independence. The desert bighorn, *nelsoni*, has also continued to diminish. Since 1948 the desert bighorn has disappeared from at least thirteen California mountain ranges including the Cosos, Slates, the Bulions, the Bristols, the Dead Mountains, Iron Mountains, Piutes, the Owl Heads, the Quail, the Shadow Mountains, Newberrys and the Ordes, the Whipples and the Big and Little Maria Mountains.

And what about the peninsular bighorn? The 500 sheep in the Santa Rosa Mountains make up one of the highest densities of sheep in the California desert. Until 1976 it was felt that the peninsular bighorn in the Santa Rosas were one of the healthiest populations in the state, despite the fact that the Santa Rosa Mountains were close to thriving urban areas of the Coachella Valley such as Palm Springs and despite the fact that Scenic Highway 74 traverses their range. Then suddenly, in 1977, despite optimum food and water conditions, the lambs of the previous year, the yearlings, suffered a loss of over 62 percent and by late summer, practically all of the yearlings were dead. The 1977 lamb crop decreased 83 percent by July of that year and were all but gone by the following spring. The same pattern occurred again in 1978 and was only just a little better in 1979. Now, in 1980, it also seems there is poor lamb survival. Usually to maintain the herd it is necessary to maintain somewhere between 26 to 35 lambs and about sixteen yearlings per 100 ewes in any given year. So the Santa Rosa Mountain herds are definitely in trouble. The California Department of Fish and Game has identified disease as a significant factor in the loss of the population during the past few years.

Other states have had similar problems with their sheep herds. New Mexico now considers their sheep *Rare* and *Threatened* and, therefore, allows no hunting. Arizona and Nevada both are home to desert bighorn and both states at this time allow a minimal amount of hunting by permit only. In Utah, only residents are allowed to apply for the very few hunting permits issued annually. The bighorn in Mexico are also open to hunting on a very limited, permit basis.

What is being done to

help preserve bighorn within the State of California? The problem is being attacked from several directions. California bighorn, those which are only found in the Sierra Nevadas, are being reintroduced into the state from stock brought from British Columbia. There have been introductions of small populations of California bighorn into three areas within the last year. The Department of Fish and Game is optimistic, but also recognizes it may be too early to tell whether or not the reintroductions will be successful. Research would indicate that twelve to fifteen animals constitutes a minimum reintroduction population. Fish and Game has not been able, with the original three introductions, to create herds of that size.

At the same time, researchers are attempting to better understand the ecological needs of the bighorn sheep. In the Santa Rosa Mountains much research has been done on water consumption and the sheep's dependence on water. It is known that, at least in desert ranges, water sources during the summer are of critical importance to the sheep. They are very sensitive to intrusions into their area, and particularly intrusions that might keep them away from summer water holes. The Department of Fish and Game and the U.S. Department of the Interior have been preparing a wildlife habitat management plan for the Santa Rosa Mountains which identifies critical areas of concern for sheep, including water holes and lambing grounds. These agencies hope to control seasonal access to all of the sections of land in the Santa Rosas that are vital to bighorn.

What may be required to save the sheep is more than just disallowing hunting and according them full protection. In addition to range access control, it may also be necessary to continue to monitor the health of the wild sheep populations because of the potential of introducing diseases from domestic animals, to which the bighorn have little or no immunity. It may be necessary to develop additional water holes and to make sure those water sources in bighorn habitat are maintained undisturbed. Lastly, as expertise develops, it may be necessary to continue to reintroduce sheep into habitat where they once existed.

Bighorn sheep are

magnificent animals. An old mature ram

may weigh 200 to 250 pounds and his majestic curling horns may constitute fifty pounds of that. The ewes are smaller and carry only a set of spiked horns. The mating season for the desert and peninsular bighorn sheep is in August and September and at that time of the year, the rams display horns and embark in head-butting contests to achieve dominance over groups of ewes. The lambs are born anytime from January to May, but the most usual time is February or March. Lambs may weigh no more than seven or eight pounds but are soon following their mothers over the precipitous landscape. The ewes, lambs and young rams will stay together throughout the spring and summer months. The mature rams, however, spend the summer grouped together in what are known as "ram-bands." It is only in the late fall that the mature rams will once again begin to associate with the ewes and younger animals.

The bighorn sheep is basically a sedentary animal. The ewes seldom leave the area of their birth and the same lambing grounds are used by generation after generation of sheep.

In the desert regions bighorn sheep usually prefer to live at elevations near the 4,000-foot level. They stay near precipitous terrain, including deep canyons and rocky slopes. Here they feel confident about their ability to escape potential predators. Sheep are primarily browsers, eating the tender stems and leaves of shrubs throughout most of the season. In the spring, though, they will take advantage of native grasses and other annual plants which appear. During winter months, when the plants have a high water content, the sheep do not need to visit open water sources on a daily basis, but during the summer months, when the plants are dry and extreme temperatures cause additional water losses, the sheep must have access to drinking water every day. Estimates on the amount of water needed varies from a quart and a half to a gallon of water per day per sheep during the dry summer months.

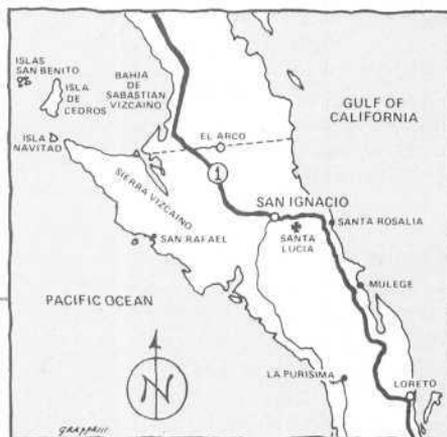
Will the sheep survive in California? We hope and believe so but it will take the concerted effort of the Department of Fish and Game along with concerned citizens to help set aside areas of prime sheep habitat so the sheep may be left undisturbed. We'll also need to continue research into the management of sheep — into their needs and into the potential disease factor which may, overnight, decimate large herds. Such research projects will take time and, most importantly, funds and trained manpower. It will obviously be necessary to take positive action towards the preservation of the sheep instead of the passive action of just protecting them and making sure that people leave them alone. The time has come to get serious about preserving one of California's, and indeed the country's, most magnificent native animals — the bighorn. 

A Tale of Two Missions

(Which May Be Just One)

What it is going to take to break the case of the lost Santa Clara mission treasure in Baja California is brawn, brains and the most advanced back-country equipment available.

By Choral Pepper



In 1965 the late mystery writer-adventurer, Erle Stanley Gardner, used planes and helicopters in a preliminary search for the lost Santa Clara mission.

At least one party of explorers – I among

them — has hovered in a helicopter over the jagged red rocks that snaggle and torture the clay mantle that holds the Santa Clara Mountains in place. A few have kicked through the deep sands etched with whale bones that mark the high-tide line of Malarrimo where obtuse currents and prevailing winds have heaped centuries of maritime refuse into dunes. Others have breathed the dust of the Sierra Pintada, scaled the rugged cliffs west of San Ignacio, or flown planes low over Cedros Island but to my knowledge, none has seriously searched for the Santa Clara treasure.

With good reason. Few know the secret of the Santa Clara mission. Time has embroidered it into the tapestry of a legend.

The more familiar legend concerns the lost Santa Isabel, a mission born in 1767 when Jesuit priests were banished from the New World because the King of Spain listened to rumors that told how priests had hoarded riches meant for the Crown. The Jesuits were believed to have constructed a secret mission in which to cache these riches, prior to their expulsion.

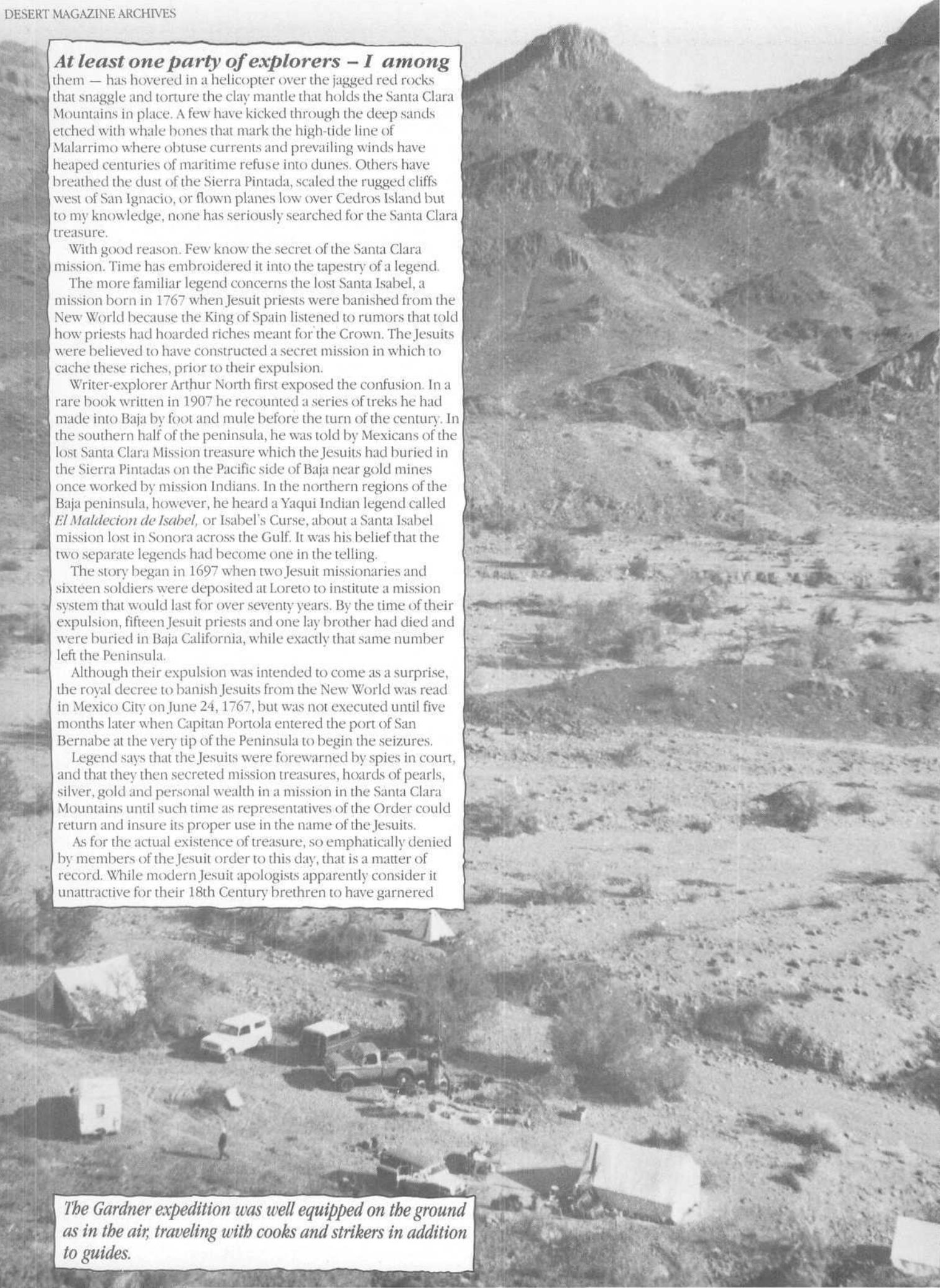
Writer-explorer Arthur North first exposed the confusion. In a rare book written in 1907 he recounted a series of treks he had made into Baja by foot and mule before the turn of the century. In the southern half of the peninsula, he was told by Mexicans of the lost Santa Clara Mission treasure which the Jesuits had buried in the Sierra Pintadas on the Pacific side of Baja near gold mines once worked by mission Indians. In the northern regions of the Baja peninsula, however, he heard a Yaqui Indian legend called *El Maldicion de Isabel*, or Isabel's Curse, about a Santa Isabel mission lost in Sonora across the Gulf. It was his belief that the two separate legends had become one in the telling.

The story began in 1697 when two Jesuit missionaries and sixteen soldiers were deposited at Loreto to institute a mission system that would last for over seventy years. By the time of their expulsion, fifteen Jesuit priests and one lay brother had died and were buried in Baja California, while exactly that same number left the Peninsula.

Although their expulsion was intended to come as a surprise, the royal decree to banish Jesuits from the New World was read in Mexico City on June 24, 1767, but was not executed until five months later when Capitan Portola entered the port of San Bernabe at the very tip of the Peninsula to begin the seizures.

Legend says that the Jesuits were forewarned by spies in court, and that they then secreted mission treasures, hoards of pearls, silver, gold and personal wealth in a mission in the Santa Clara Mountains until such time as representatives of the Order could return and insure its proper use in the name of the Jesuits.

As for the actual existence of treasure, so emphatically denied by members of the Jesuit order to this day, that is a matter of record. While modern Jesuit apologists apparently consider it unattractive for their 18th Century brethren to have garnered



The Gardner expedition was well equipped on the ground as in the air, traveling with cooks and strikers in addition to guides.

wealth, those of the time took pride in the beauty and richness of their missions. So did the *padrones* who subsidized the holy fathers in order to insure for themselves a final benediction.

And yet, when the Franciscans took over from the Jesuits, where were the "golden chalices, sacred vessels of gold, precious vestments, golden altars, images adorned with pearls" and other ecclesiastical paraphernalia described by the Jesuit Father Baegert while he was in charge of a mission in Baja? In the published inventory of mission goods acquired by the Franciscans, the only mention of gold was in the amount of \$7,650 in gold dust and silver bullion. Candlesticks, chalices, vessels and all other churchly appointments described in the inventory were rather ordinary, and of silver.

With only five months of warning, the Jesuits would have had to work fast to send runners the length of the mission chain to arrange a treasure cache in the north. But utilizing a known location in a central region, it could have been accomplished.

Santa Clara had already been explored and designated for a mission. According to Fernando Ocaranza's *Cronicas y Relaciones del Occidente de Mexico*, a missionary from San Ignacio recommended the founding of a new mission there in 1737 in response to a request from the friendly Walimea Indian tribe of the area. In another reference, Venegas-Burriel reported that the project was discussed in an official Jesuit report dated 1745 with the idea of Christianizing wild Indians in the western area of the Peninsula so no pagans would be at their backs while they continued building the mission chain to the north. A map in this same volume shows a mission located in the Santa Clara region that is called San Juan Bautista, while another Jesuit map dated 1757 notes an unfinished mission of that name in the Santa Claras.

A prerequisite to a Jesuit treasure cache would be a location to which the Order could return later by sea, undetected from populated areas on the shore. Explorations of the Pacific Coast had been instituted by the Order as early as 1721 when Father Ugarte equipped an expedition to find a watering port for Spanish galleons on the Phillipine run. His full report was in the hands of the Jesuits, including maps and explanations of three suitable harbors with sufficient timber and fresh water. One of these was convenient to the Santa Claras.

In 1745 the Father Provincial ordered a report describing the status of mission stations. It was stated in this document that the mission at San Ignacio, directly east of the Santa Clara range, supported eight mission stations radiating from distances of three to eleven leagues from San Ignacio. In which direction the stations lay was not indicated, but the two most distant were Santa Marta, at eleven leagues, and Santa Lucia at ten leagues. Figuring approximately three miles to a league, this would place both

Santa Marta and Santa Lucia close to the foothills of the Santa Claras. Considering the unusual friendliness of the Walimea Indians, together with the area's proximity to a good port, it is

possible that the Jesuits used the unfinished mission begun there for a temporary shelter while they hastily constructed a cache for treasure which they referred to as the Santa Clara Mission in documents and in communicating with their unsuspecting Indian helpers.

The Santa Clara region lies in a confusing

mountain mass. Eons ago, when the Vizcaino desert was submerged by the sea, two adjacent ranges formed part of a long group of islands of which Cedros, Natividad and San Benito are the existing representatives. In time, the two adjacent ranges acquired different names, one being Santa Clara and the other, Sierra Pintada.

In a 1907 map, Arthur North lumps them together as Sierra Pintada. However, miners in the 1900s differentiated between them, albeit like the natives, indiscriminately.

Written accounts and maps of this isolated area are relatively scarce, the mapmaker's information varying with the tradition of his informant. At one place, only a narrow pass separates the two ranges. Unfortunately, however, early perpetrators of the legend of the Santa Clara Mission failed to consider which name modern geographers would give to which range.

The Santa Clara range has not been explored but in the 1890s, a National Academy of Science expedition led by Edward Goldman made a brief side trip into it to search for antelope. An San Angel, a deserted ranch in a shallow arroyo beside springs which gave abundant water, they found date palms and other plants which made it a pleasant place to camp. Could those palms have been planted to shade the missionaries while their Indian slaves worked secret mines?

Water in the Pintada range is also scarce. There are only two known sources. One is presently a small ranch close to the north of the range called San Jose de Castro. The other is San Andres, a ranch and old mining camp located just south of the Sierra Pintada. A legend that Indians had collected "gilt stones" for the priests in this area is what led to the gold discovery in 1893, which lasted for ten years and produced \$75,000 in placer gold. There are still rich placers in the vicinity, but its extreme isolation put an end to mining long ago.

During the gold rush to the Pintadas, miners concentrated on the western slope, ignoring the eastern one and the side of the pass now designated as the Santa Clara. An old trail from San Ignacio via San Angel is visible from the air through this pass, however. With a good four-wheel-drive vehicle and electronic metal detectors, a search launched from the pass that divides this single range with two interchangeable names could be one way of working both ends to the middle.

It is unlikely that the Santa Clara mission would consist of more than a rock or adobe shelter with thick walls and a deep foundation for securing and protecting the treasure. If adobe, it would be melted to the ground by now. Only the subtle clues of proximity to water and arrow chippings or other artifacts left by Indian workers would say to an astute treasure seeker, "Dig here!"



These mountains, variously called Sierra Pintada or Santa Clara, were once islands when the Vizcaino desert was submerged by the sea.

E C H O E S O F FORT DAVIS

*by Kaye Ann Christie
photographs by Lowell Christie*

The ground is dry and bare. The Texas sun glares down through patches of gray clouds, spotlighting vultures riding thermals off in the distance. The black windows of still crumbling

buildings stare sightlessly across a parade ground at their recently rejuvenated companions. At the far end of the field, down the long rank of houses called Officer's Row, are other ruins



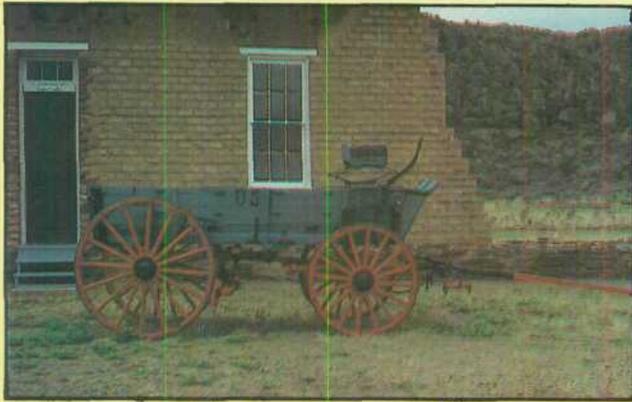
Officer's Row reflects the lace curtain society of early Army posts.



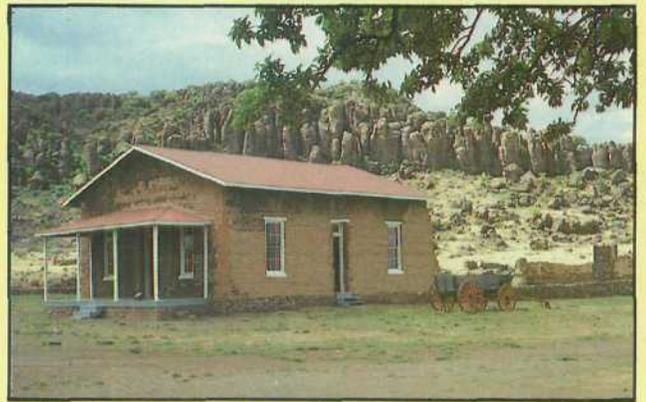
Quarters for bachelor officers saw but ten years of use.



The effort is preservation, not reconstruction or replica.



Supplies came by wagon from as far away as St. Louis.



Five hundred Army people depended upon the Post Commissary.



Officers lived in luxury unknown elsewhere on the frontier.

THE INDIANS WERE THE REASON FOR FORT DAVIS. GREAT BANDS OF APACHES AND COMMANCHES SWEEP THROUGH THIS AREA ON THEIR WAY SOUTH FOR RAIDS AGAINST MEXICAN SETTLEMENTS ACROSS THE RIO GRANDE.

which are freshly painted.

Beyond, past the half-forgotten foundations of still more structures are the cliffs that surround the community on three sides. They dominate the scene, and contain the silence.

Guides, POST. Bring your companies to parade rest . . .
Sound, OFF . . .

The brassy sound of a marching band playing "Hail Columbia" echoes from modern loudspeakers, but the close-cropped drill field is empty. Voices and music reverberate from the buildings.

Present, ARMS . . .
Order, ARMS . . .
Attention. Carry, ARMS . . .

The voices, the music, appear to be coming from the Post Commander's quarters. They are the recorded sounds of the Army's end of day, vintage 1890, and this is no longer Fort Davis National Historic Site; it is Fort Davis, key Army post in the defense system of West Texas.



This is the second Fort Davis. The first buildings, shabby structures of pine and thatch, are gone now, claimed long ago by the ravages of wind and weather. They were built farther back in the canyon in a place where Indians could climb up over the rocks to fire down on the fort below.

A TROOP OF BLACK SOLDIERS DEFENDED THE FORT AGAINST INDIAN RAIDS. THEIR DAYS WERE FILLED WITH THE MONOTONOUS RITUAL OF DRILL, GUARD DUTY AND TARGET PRACTICE. DESERTION WAS COMMON.

The Indians were the reason for Fort Davis. Great bands of Apaches and Commanches swept through this area on their way south for raids against Mexican settlements across the Rio Grande. These buildings, these ruins, were part of a bustling business, the business of protecting wagon trains and stagecoaches on their way west.

It was not mere curiosity that brought wagon trains into the American Southwest, it was gold. This was the most convenient route to the new gold fields of California. The northern routes required crossing both the Rockies and Sierra Nevadas so a southern route was needed, one circling around instead of crossing the mountains. The El Paso road connecting St. Louis, Missouri, with San Francisco, passed through here, and Fort Davis was built to protect it.



It must have been a welcome sight to travelers when they reached this deep canyon with its shimmering cottonwood trees and clear-running stream. Along with all the essentials of a good fort, it offered one more benefit to those esthetically inclined — beauty. The rugged rocks of the canyon, the lush greenery of trees and grass, *and roses*. The report of Lt. William H. C. Whiting, who explored the area for the Army, stated: "Wild roses, the only ones I had seen in Texas, here grew luxuriantly." Strategic military setting: wood, water, grass, and . . . roses.

The flowers are gone now, the magnificent cottonwoods have been long since cut down for lumber and fuel, but the crystal water of Limpia Creek remains. There are newly planted trees. A hopeful row of cottonwoods stands bravely in front of the officer's quarters. In time their branches will shade both parade ground and houses to soften the bleakness.



Contrast this with an earlier time when the cliffs echoed with the sounds of shouting men, whinnying horses and creaking wagons. Texas seceded from the Union in 1861, so old Fort Davis was abandoned by the Army. It was occupied

only briefly by the Confederates before they too retreated, leaving it to be wrecked by Apaches. It was not until 1867 that the fort was relocated and rebuilt, here at the mouth of the canyon. This time it was manned by the United States Cavalry, by a troop of black soldiers who defended the fort against Indian raids.

A boardwalk leads past the long white barracks of the enlisted men. It was close quarters, the space allotted to a man being little larger than that supplied for his horse. But the men required little room. Their days were filled with the monotonous ritual of drill, target practice and guard duty. Desertion was common.

On the far side of the barracks lie the foundations of stables with stalls for 500 horses. There were no camels here in the 1870s as they dated from an earlier era. It was in 1857 that the first of that breed arrived at Fort Davis, part of an experiment to determine their adaptability to travel across the American deserts. The trials were a success and but for the arrival of the transcontinental railroad, we might have grown up with Hollywood movies featuring soldiers riding over the horizon on the backs of their trusty camels.



New Fort Davis had an active life of less than 25 years. 1880 saw the conquest of the last of the Apaches, and the fort no longer had a purpose. In June, 1891, the post was ordered abandoned.

What happens to a fort that has outlived its usefulness? It decays and it crumbles, its ceilings leak, its porches rot. In time, if someone notices, the ruins may be salvaged and the destruction of time slowed. Such is the case with Fort Davis.

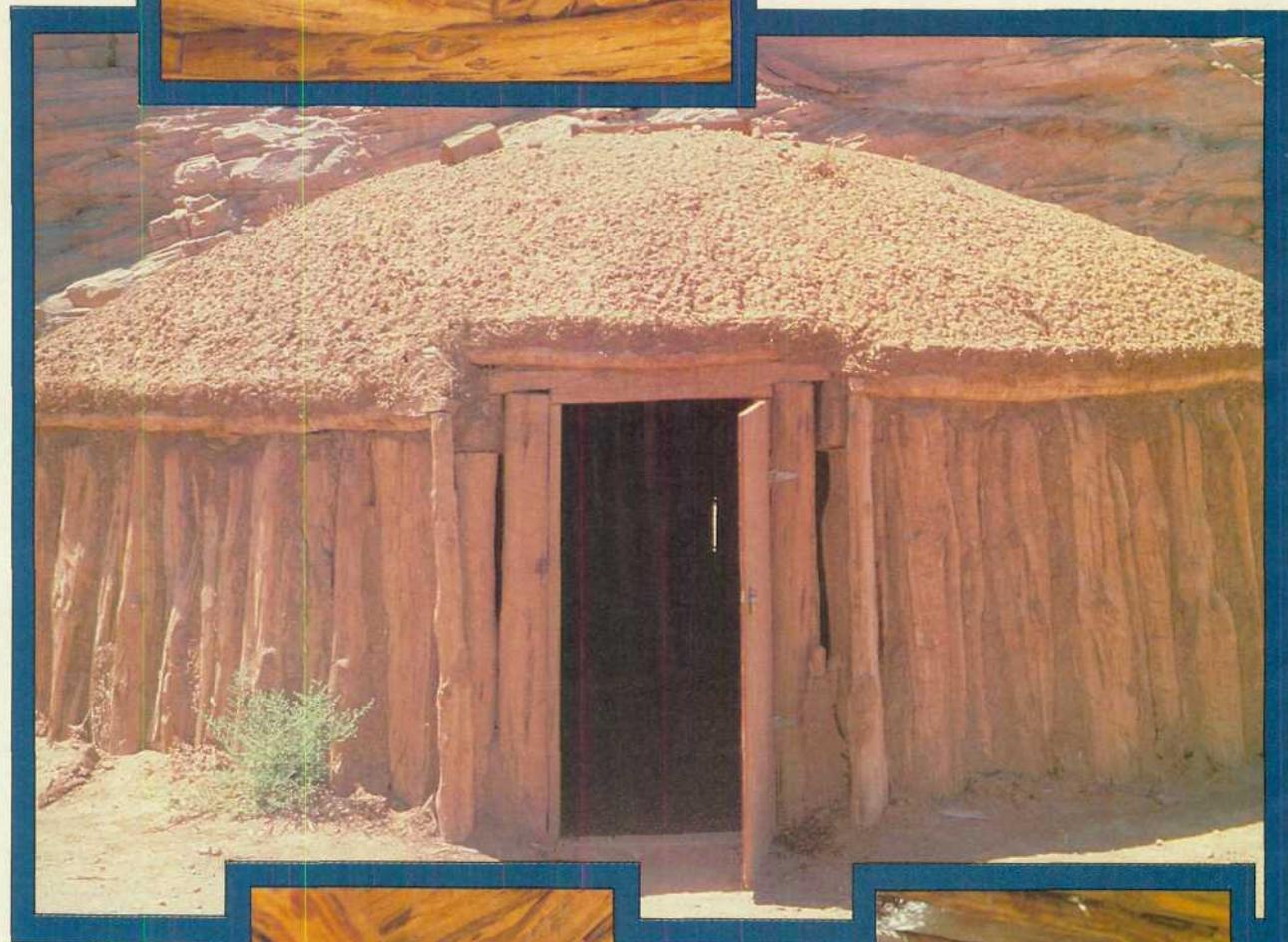
Since 1961 it has been the responsibility of the National Park Service to preserve what remains of the fort. Workers scrape and paint the decaying timbers, and shore up the crumbling walls. Archeologists uncover the foundations of additional structures. Signs now identify the approximately fifty buildings.

As the blast of the trumpets and rumble of drums fades away, the bricks lose some of their luster, a little more dust is noticeable in the air, and the 20th Century intrudes.

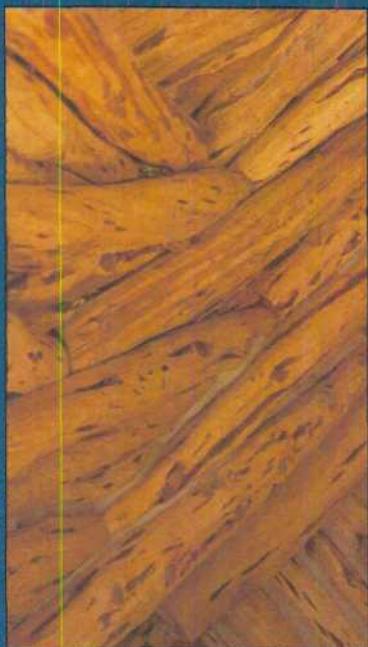
But Fort Davis lives on. In the museum displays, the completed re-constructions and even in the silent ruins, this fort is a reminder of our heritage — of a day when the red man used guns instead of billboards to plead his cause. **D**



The square smoke hole (left) has been obsoleted now by the modern Navajo's preference for wood stoves but it is included in the design, nevertheless.



The door to the hogan (above) traditionally opens to the east, and thus to the friendly influences of Morning God.



The roof (left) is quite heavy but the way it is put together gives the feelings of security and spaciousness.



(Right) Summer houses like this one often have poles and brush on the sides to keep out the wind.

TO A NAVAJO HOME IS THE HOGAN

Article and photographs by BETTY TUCKER-BRYAN

AS THE SUN SLOWLY CASTS late afternoon rays across the red sandstone cliffs of the Colorado Plateau, an observer may detect the gentle movement of the Navajo people.

A young girl extracts her long red skirt from the clutches of a spiny cactus, shoos a tired young lamb back to the flock and with the help of her two dogs, heads the sheep toward the corrals and home.

Along the highway an old Hosteen astride his horse rides slowly. Across the saddle is a knotted sack containing pinto beans and onions. He's been to the trading post, now he's almost home.

A pickup truck, driven by a young man wearing a bright yellow hard hat, slows and turns into a narrow road that winds across the desert. He's been at work in the power plant and now he's going home.

Home to the Navajo is not the same as it is to we non-reservation people. The hogan is an entity unto itself. Through the generations tradition has told them that the first hogans were built at the rim of Emergence Place by the Holy People such as Salt Woman and Talking God. These hogans were constructed of abalone shell, turquoise, jet and white shell. Once furnished, they were blessed and used as a meeting place for the deities involved in creation. Later, Changing Woman taught the Navajo to construct and bless their own hogans.

The old type hogans, known as *alch'i'adeez'abi* (sticks coming together), used three main logs in a *tipi* shape and four shorter ones to form an entryway. Smaller poles filled in the empty spaces and the entire structure, except the smoke hole and entryway, was covered with cedar bark and at least six inches of dirt.

But over many years, particularly after the Navajo internment at Fort Sumner in the 1860s, the many-sided cribwork hogan became popular.

To build his home the Navajo doesn't call in an architect and contractor. His home is too personal for that. Instead, the head of the family selects a suitable site well removed from hills of red ants, as it is told that in the underworld these pests troubled First Man and the other gods, who then lived together, and caused them to disperse.

Once the location is approved, friends and neighbors are enlisted to help. They go looking for the proper trees, often far from the selected site. Pinyon or cedar is generally used. Once the trees are cut, trimmed of bark and roughly dressed, they are dragged to pickup trucks and loaded. Many times, when the terrain is rough, the logs are snaked to the home's site behind horses.

The trees are usually cut in the autumn season when the sap is "tired," then allowed to dry until after the violent "male" rains of spring.

When the time is right, the helpers come again. They lay out the framework for the *tsin'dadiit'it'in* (lots of logs woven together). The hogan can have seven or eight sides or even more, depending on the size wanted.

For an eight-sided hogan, eight twelve-foot posts are planted upright and two-feet deep in an octagonal design. The builders make sure the doorway faces east so that the house is directly open to the friendly influences of the Morning God, *Qastceyalci*.

Around these corner posts go large base logs that are securely fastened. The building continues much the same as constructing a log cabin. Often the corner logs are topped with large logs and smaller trees cut to stand upright all around the framework, rather than in the log cabin method. This depends a lot on the size of available trees.

Whichever style is used, the roof is invariably in a cribbed-dome shape with a square, open smoke hole in the center. The cracks between the logs are chinked with wet earth. The roof is covered with tumbleweeds, greasewood or whatever is at hand, then packed with seven or eight inches of wet earth. This dirt will wash off, so it must be renewed each year. The result is a warm, cozy home that defies high winds, "male" rains and deep snows.

Once built, this hogan (smelling just like a cedar chest) is viewed as a living entity. It needs food and protection and is capable of being talked to and of feeling lonely. It is not only a traditional home but also, the only suitable place for worship.

Before the new hogan is occupied, the head of the household builds a fire inside. Then four or five of the inside foundation poles are marked in a sunwise direction with upward marks of corn pollen or meal. The poles are then associated with Mountain Woman, Corn Woman, Wood Woman, and Water Woman. Blessingway songs are sung and prayers said. Proper steps are taken toward reducing sickness, bad dreams and hardship for those who will live there. Also, care is taken to show respect for the hogan and make sure it doesn't feel lonely. It is important that happiness, peace, comfort and holiness be affirmed.

Today most hogans have wood stoves that serve for both heating and cooking. Many have modern beds though some families sleep on fine sheepskins spread on the floor, keeping warm with woolen blankets. These are rolled and stored out of the way each morning. The traditionalists sit or squat on rugs. The modernists opt for sofas or chairs. But, in general, hogans house both the old ways and the new and so are eclectic in furnishings. An area is always prepared for the massive loom if a weaver is to live there.

During the hot months a summer house is built of upright, forked poles that are anchored in the ground. Slender roof poles are laid horizontally across the framework to provide support for a brush roof. Often poles and brush are put on the sides to keep out the wind. This ramada-type shelter is amazingly cool and shady.

It is here that the women prepare food, weave, talk and tend the babe in the cradleboard. When the nights are hot, blankets are moved to the summer house. Then the weary Navajo speak softly of the day now past and of the things to come, until sleep overtakes them.

And so, even today, the Navajo returns from the hills, the trading post, the power plant and from college to the traditional hogan. Even though the hogan may sit beside a mobile home, trailer or conventional "white man" house, it remains the true home from birth to going up the smoke hole at death. 

GOLDFIELD NEVADA

Article and photographs
by HARVEY J. BERMAN

CREATED

IN THE tradition of the "Grand Hotels" of a bygone era, the four-story Goldfield, its broad pillars, ornate cornices and spidery grillwork terraces shimmering in the bright Nevada sun, seems ready for guests. It has been, off and on, for more than half a century.

In its opulent lobby, comfortable leather settees and overstuffed crushed velvet chairs surround a magnificent grand piano, its keyboard bared and ready to be played. Here and there are discreetly placed standing ashtrays and spittoons. Not your ordinary kind, mind you. These are of sterling silver, probably mined in the nearby hills.

The subdued paneled dining room, with its plush ruby drapes and polished gaslights, has been meticulously set for a sumptuous dinner. High leather-backed chairs are drawn up to the tables, covered by hand-stitched Irish linen tablecloths and napkins.

This state of apparent suspended animation is due not to the fact that Goldfield has been isolated from mankind for fifty years, but because a group of investors from Las Vegas restored the hotel and its furnishings about three years ago and then went broke before they could open for business.

The Goldfield has an aura of hushed expectancy. Only the heavy mantle of desert dust everywhere attests to the fact that its invited guests never arrived. And the padlocked doors ensure that they never will, at least until one of the many investors actively interested in the property makes a deal.

For Goldfield, Nevada, a comfortable drive northwest along Highway 95 from the exuberance and neons of Las Vegas, is a ghost town.

It's hard to believe, when you first drive through Goldfield, that this once robust and lusty community of 30,000 died early in the 1920s, when its gold ran out.

Few western towns have better resisted the erosion of time, sand and wind. Fewer still are as intact as they were on the last days of their lives. And no abandoned community anywhere so casts a spell over visitors, deluding them into imagining — only for a brief moment — that it is alive and well and that its ghosts are walking the streets.

Listening closely, one can almost hear the tinny-tin-tune of the player pianos and the gales of laughter stemming from the recesses of Goldfield's 53 dark and dank saloons. There, too, are the "painted women," drawn for obvious reasons to every mining encampment; the tin-horns, poised like vultures to separate a man and his hard-earned nuggets at the turn of a card; and the other colorful and familiar characters of western mining lore.

They were all drawn to Goldfield in 1902 by the electrifying news that "Sad" Billy March and "Horse" Harry Stimler had discovered "one of the richest lodes ever found." (Every strike in Nevada, during the period, was the "richest" — until it suddenly petered out.)

At the time, Goldfield was known as "Grandpa." But when March and Stimler staked out their claim and began unearthing rich "jewelry rock" valued at up to \$100 per pound, the name quite appropriately changed to the present one.

FEW

MINING towns sprouted as quickly as Goldfield. Fewer still had stronger delusions of permanent grandeur.

By late 1903, the community already had a population of over 10,000. Three years later that number had tripled and lots were selling for the then unheard-of price of \$4,500 each.

Within a few years the majestic hotel, a theater, several fine stores and a host of stylish mansions had sprung up like mushrooms. So had a proliferation of gaudy saloons.

By far the gaudiest, lustiest and most famous belonged to the entrepreneur extraordinaire George Lewis "Tex" Rickard. Prospector, adventurer, gambler and eventually promoter, owner Rickard's Northern was more, far more, than just a saloon. It was a local institution, (see *Desert*, August 1980), that at its peak employed eighty full-time bartenders.

The "red-eye" flowed in a ceaseless cascade. Deals were made over a bottle — and promptly unmade at dawn's sobering light.

For the ambitious, irrepressible and sometimes questionable Rickard, however, the Northern was just a stepping stone to bigger and better things.

He had amassed a fortune in the

Klondike, some say by winning his claim in a rigged poker game. Moving on to California, he promptly lost it in a series of totally uncharacteristic, hair-brained ventures.

Now, in Goldfield, he was again a respected and wealthy pillar of local society. But it wasn't enough.

In 1906, Rickard pulled off the coup that was to firmly establish him nationally as one of the shrewdest and most astute promoters of his day. He arranged and promoted a light heavyweight championship prizefight between Joe Ganz and Battling Nelson.

The row — no holds barred — went 42 grueling and bloody rounds. It ended with a pulverized Nelson, nearly beaten to death, flat on the canvas and Ganz acclaimed as World Light Heavyweight Champion.

His reputation made, Rickard soon left Goldfield for the "big time." But stories grown into legends about him abounded in the mining town long after he left. And the Northern was his legacy to a community that he and gold made famous.

Aside from the Ganz-Nelson fight which Rickard promoted in 1906, another battle in Goldfield that same year also made history. This one, however, was far more significant and eventually impacted on mining camps throughout the West.

Increasingly bitter over their back-breaking work, long hours, primitive conditions and low pay, the miners of Goldfield launched a series of strikes against their companies. The men refused to dig. More than that, they flooded some of the mines, engaged in free-for-alls with company officials on the streets of the would-be El Dorado and virtually brought mining in the area to a complete halt.

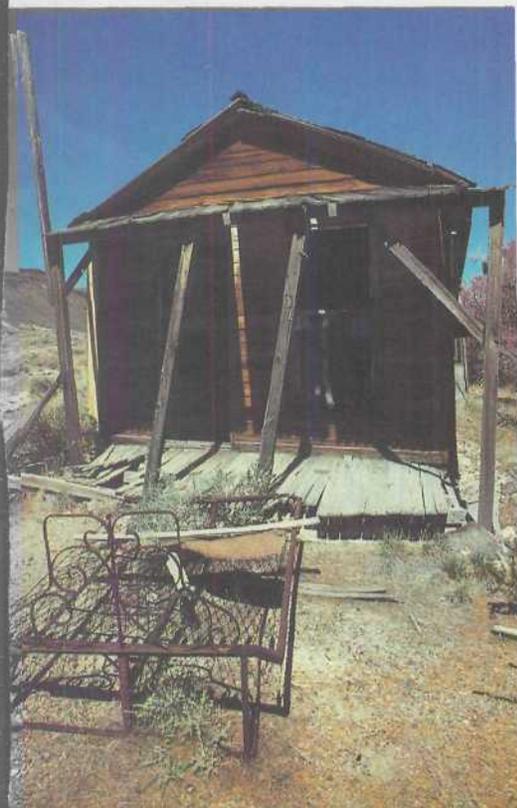
It was a turning point. Helmeted U.S. troops, reportedly "cracking heads" to enforce the law, ultimately restored order but the miners never forgave or forgot. In the years that followed, Goldfield operated under an uneasy armed truce.

Despite the situation, however, Goldfield in 1909 broke its own records with miners and prospectors wresting more than \$11 million in gold-laden ore from the scarred hills north of town.

The achievement, though, was shadowed with mounting concern. Everywhere they dug worried Goldfielders



Goldfield's high school (above) graduated its last student years ago. Miner's shack (below) shows the living conditions that led to the prolonged and violent strike.



noticed the first tell-tale signs that their supposedly inexhaustible underground treasure trove was running out.

It was all too true. By 1913, production plummeted to \$5 million. Eight years later, it was down to an annual rate of \$1.6 million. In the ensuing three years, only \$150,000 worth of the shiny yellow metal was mined. Soon afterward, even this dwindled to nothingness.

In all, during its heyday, Goldfield's hills yielded close to \$105 million. But now its veins were anemic, drained. Goldfield was a doomed community. It clung to life for a few more years in the 1920s, then surrendered and quietly joined dozens of other mining communities like it in a permanent twilight zone.

THESE DAYS

HOWEVER, Goldfield is enjoying a new "gold rush." A growing number of tourists, attracted by the town's colorful and lusty heritage and the legends that have grown up around it, are now strolling its streets.

They can still savor the flavor of the community's outstanding showplace, the

Goldfield Hotel. Gaunt and silent, it still dominates the town. And, no doubt, some spend their evenings at Beverly Harrell's famous Cottontail Ranch at Lyda Junction, fifteen miles south of Goldfield on U.S. 95. Ten miles to the north, one can visit Tonopah where Jack Dempsey once tended bar.

While not all of Goldfield's 53 saloons are still standing, in amazingly good repair are a smithy, stables and the general merchandise store which provisioned prospectors and miners for so many years.

Visitors will certainly want to see the remaining rude cabins in which the working miners lived during the Goldfield boom. And north of the town are the diggings from which the community drew its life's blood, their rough hewn timbers rotting but somehow still standing.

Goldfield may indeed be a part of history. But for those who explore the town and revel in the lore and legends of the "single blanket, jackass prospectors" and the miners who almost made Goldfield the El Dorado of their dreams, it's a living history everyone can share and treasure. 

GAIL GARDNER

ARIZONA'S "POET LARIAT"

by MARSHALL TRIMBLE

ON A COOL June afternoon during the year of our Bicentennial, a large crowd had gathered in Payson for the Old Time Country Music Festival held each summer in that mountain community nestled at the foot of Arizona's Mogollon Rim. There were several groups of musicians, ranging from country-rock to bluegrass to old-time fiddlers.

The program was excellent but not unlike dozens of others in which this writer has performed or observed. This show, however, was destined to offer *aficionados* something very special. After the next to last act had finished, the announcer stepped up to the microphone and announced, "And now ladies and gentlemen, Prescott's own — Gail Gardner!"

From out of the crowd stepped a one-eyed, bow-legged, old, stoved-up cowboy. His face was full of freckles and sunspots from years spent in the out-of-doors. He climbed up the stairs to the platform with the help of a couple of friends, took hold of the mike with one hand and cast his good eye over the crowd and gave a wry grin. "I don't use any accompaniment when I sing," he said, "for I've found that the guitar or piano is always off-key from my singing." With a wink and another grin he began his doggeral verse masterpiece.

*"Way up high in the Sierry Petes, where
the yellar pine grows tall,
Ole Sandy Bob and Buster Jig had a
rodeer camp last fall..."*

The audience that unforgettable afternoon was given a rare treat. The performer was Arizona's "Poet Lariat," Gail Gardner. There aren't many real living legends left in the world today but to those who carry fond memories of those "thrilling days of yesteryear," Gail Gardner is that — a living legend. His lyrics have been sung by singers of cowboy songs in the most remote cow camps on down, or up, to the top stars of country music.

It all began back in the early 1900s when Gail and Bob Heckle were running a "greasy sack outfit" in the Sierra Prieta Mountains outside of Prescott. These mountains were known locally as the "Sierry Petes." An old prospector had given them that dubbing some time before and the name stuck.

"Ob, they'd taken their hosses and

*running' irons,
And maybe a dawg or two,
An' they lowed they'd brand all the
long-yered calves
That come within their view.
And any old doggie that flopped long
yeres,
An' didn't bush up by day,
Got his long yeres whittled an' bis old
hide scorched,
In a most artistic way."*

In the song, Sandy Bob is Bob Heckle. He is also an uncle of country music star, Marty Robbins. Buster Jig is Gail. He picked up that moniker from his father's initials. His father, James I. Gardner ran a local general merchandise store and his son Gail was called "Buster J.I.G."

There have been many misinterpretations of Gail's lyrics, mostly from singers and critics who "didn't know which end of a cow gets up first." For example, one critic surmised that the two cowboys had to be rustlers since they were carrying "runnin' irons."

"That wasn't the case at all," Gail says. "All cattlemen carried little short runnin' irons in their saddle bags when gathering cows. When we found a neighbor's cow and calf we put the mama's brand on the calf same as they did when they found one of ours. We worked together that way. Besides, you couldn't carry a branding iron for every outfit in the country in your saddle bag anyway."

*"Now one fine day ole' Sandy Bob,
He throwed his seago down,
I'm sick of the smell of this burnin' hair
And I 'lous I'm a goin' to town.
So they saddles up an' bits 'em a lope,
For it warn't no sight of a ride,
And them was the days when a Buckeroo
Could 'ile up his inside"*

The song, written in doggeral verse and sung to the tune of "Polly Wolly Doodle" tells the true story of two drunken cowboys, Gail Gardner and Bob Heckle out for a "whizzer" on Prescott's famed Whiskey Row back before prohibition when there were some forty saloons that stretched down Montezuma Street all the way to the Santa Fe depot. These two cowboys had just succumbed to near every vice that Prescott had to offer in those not-too-halcyon days and were headed back to camp. Along the way one suggested that the "devil gets after cowboys that act the way we'd been actin'." The other

replied in the cocky, devil-may-care manner that typified the breed: "If the devil comes after me I'll rope 'em, mark and brand 'em and tie a knot in his tail."

The incident was forgotten until several years later as Gail was going off to World War I. He was riding a Santa Fe train across Kansas when he chanced to see farmers walking among their muley cows afoot and he immediately thought of all the onery critters he and his friend had choused in Arizona's mountain country. He sat down, and on Santa Fe stationary he penned the words to "Sierry Pete."

*"Ob, they starts her in at the Kentucky
Bar
At the head to Whiskey Row,
An' they winds up down by the Depot
House,
Some forty drinks below.
They then sets up and turns around,
And goes her the other way,
An' to tell you the God forsaken truth,
Them boys get stewed that day."*

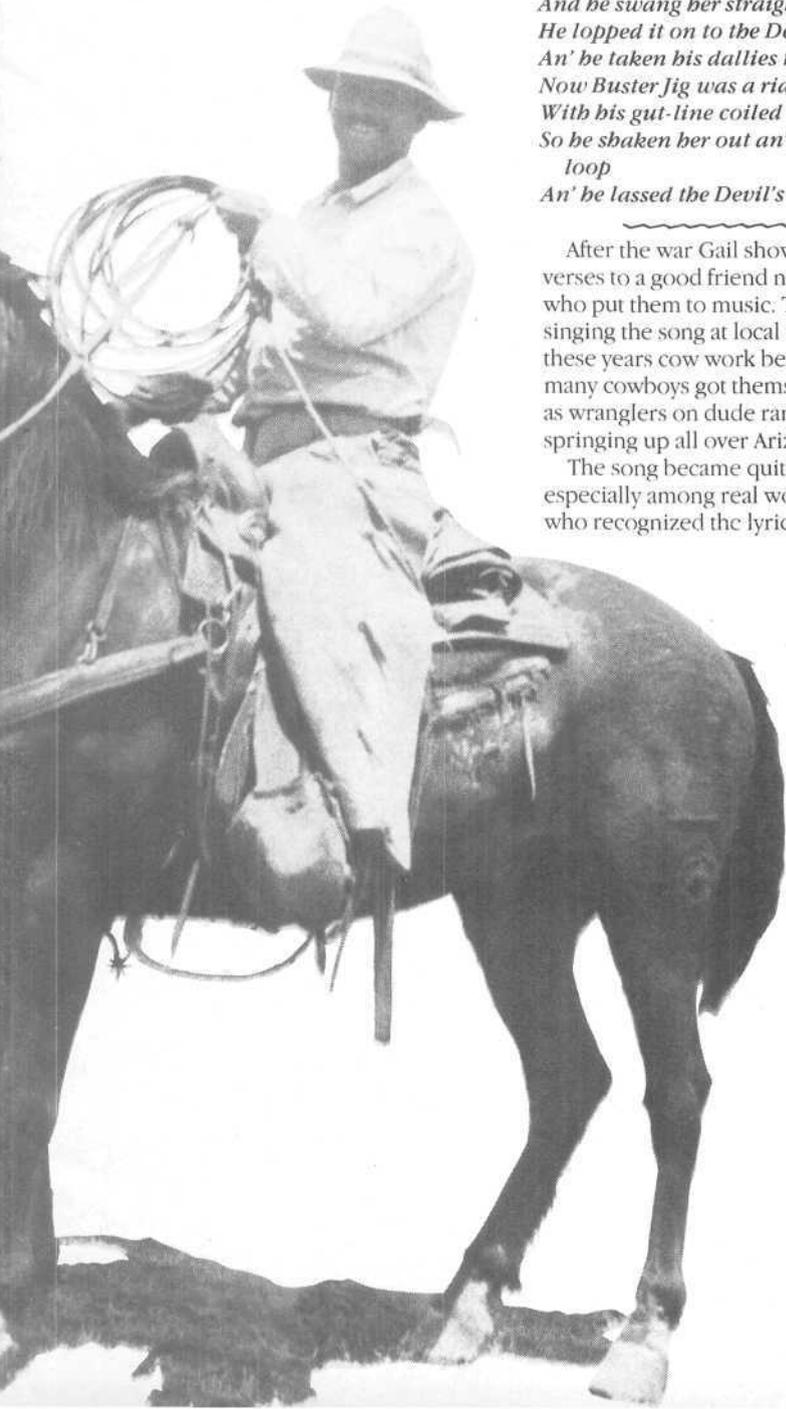
Gail's home on Mount Vernon Street is one of those quaint New England-style houses that characterize early Prescott architecture. It's full of a hundred years of

GAIL GARDNER, A WORKING COWBOY IN HIS YOUTH (RIGHT), IS TODAY PRESCOTT'S PRIME ATTRACTION FOR THOSE ABLE TO APPRECIATE TRUE DOGGERAL VERSE. PAINTING (BELOW) COMMEMORATES HIS MOST FAMOUS COMPOSITION.



Gardner family memorabilia. Gail was born there in 1892 and there he remains. The walls are decorated with books, old photographs, paintings, and Navajo rugs. Gail calls the decor, "early Fred Harvey." His western book collection is larger than most public libraries'. The whole place lives and breathes Arizona history. In one corner of an upstairs room is an old, high cantled silver saddle. In the closet hangs a fancy silver concho bridle with an elaborate eight-strand rawhide braided set of reins and romal.

~~~~~  
*"As they was a ridin' back to camp  
 A packin' a pretty good load,  
 Who should they meet, but the Devil  
 himself,  
 A prancin' down the road.  
 Sez he, "You onery cowboy skunks,  
 You'd better hunt your holes,  
 For I've come up from Hell's Rim Rock,*



*To gather in your souls.  
 Sez Sandy Bob, "Old Devil be damned,  
 We boys is kinda tight,  
 But you ain't a-goin' to gather no  
 cowboy souls  
 'bout you has some kind of a fight."*

~~~~~  
 Gail's main "treasure" in this rich cultural setting hangs over the fireplace in the living room. A large painting illustrates two happy-faced cowboys astraddle two skittish, wild-eyed cow ponies. Each has his rope in action. One has thrown a loop over the horns of a diabolical critter that can be none other than the Old Devil himself. He's taken up a dolly around his saddle horn while his partner is about to drop a loop around the hind legs of the twisting, scowling Foul Fiend.

~~~~~  
*"So Sandy Bob punched a hole in his rope  
 And he swang her straight and true,  
 He lopped it on to the Devil's horns,  
 An' he taken his dallies too.  
 Now Buster Jig was a riata man  
 With his gut-line coiled up neat,  
 So he shaken her out an' he built bim a  
 loop  
 An' he lassed the Devil's hind feet."*

~~~~~  
 After the war Gail showed his doggeral verses to a good friend named Billy Simon who put them to music. The two began singing the song at local rodeos. During these years cow work became scarce and many cowboys got themselves employed as wranglers on dude ranches that were springing up all over Arizona.

The song became quite popular, especially among real working cowboys who recognized the lyrics as having been

written by one of their own kind.

They took great pleasure and pride in the fact that it was a couple of cowboys that took the Devil in tow and with some forty drinks under their belts at that.

~~~~~  
*"Oh, they stretched him out, an' they  
 tailed him down  
 While the irons was a-gettin' bot,  
 They cropped and swaller-forked his  
 yeres,  
 Then branded him up a lot.  
 They pruned him up with a de-bornin'  
 saw  
 An' they knotted his tail fer a joke,  
 They then rid off and left him there,  
 Necked to a Black-Jack oak.  
 If you're ever up high in the Sierry Petes  
 An' you bear one Hell of a wail,  
 You'll know it's that Devil a-bellerin'  
 around  
 About them knots in his tail."*

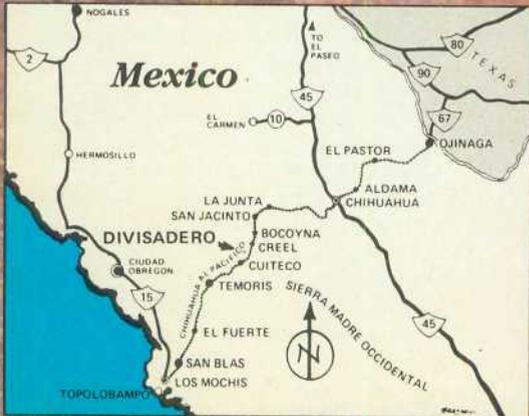
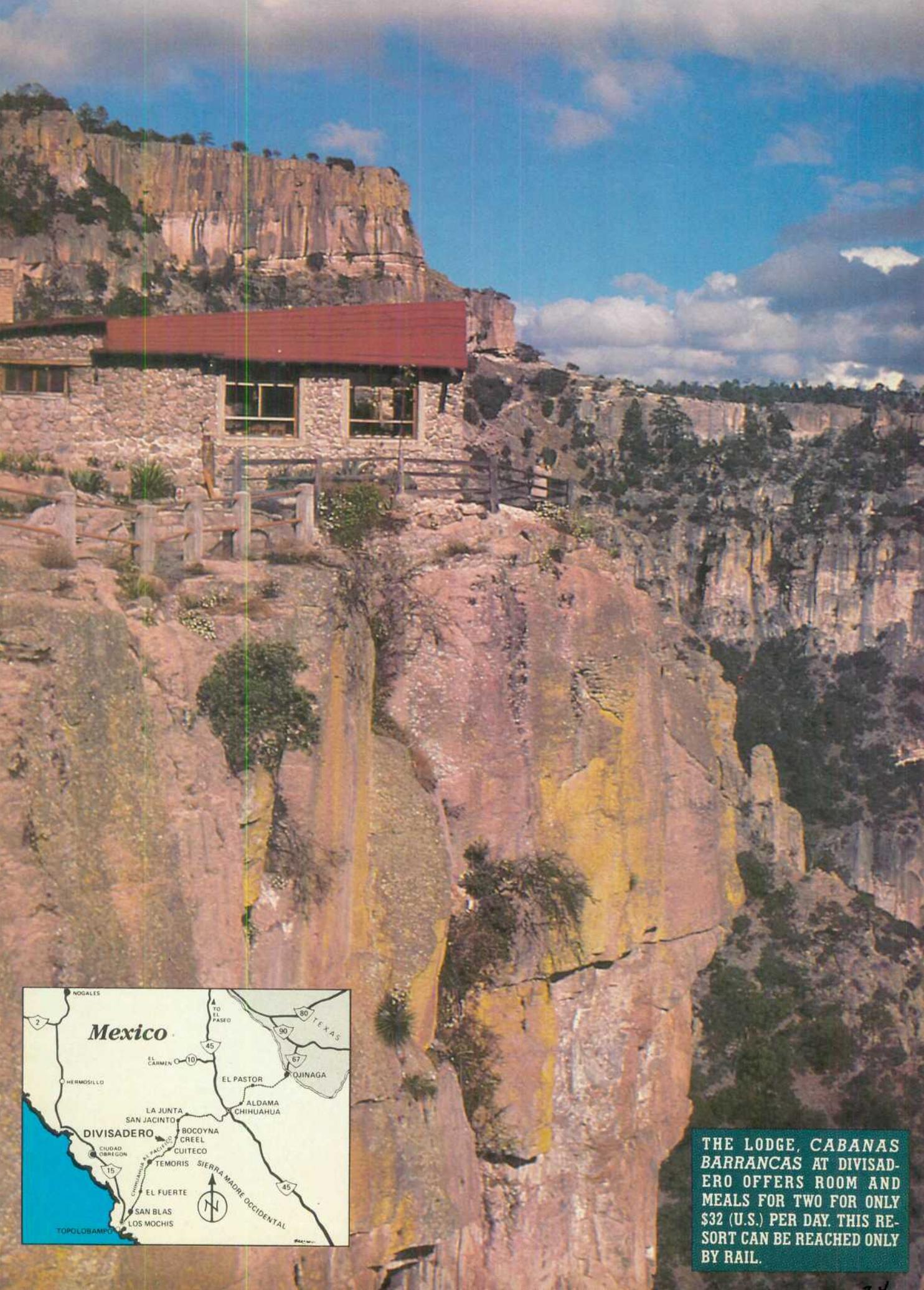
~~~~~  
 Gail is a kind of anomaly among old-time cowboys. He has a Bachelor of Science in math from Dartmouth. He left his hometown of Prescott at the tender age of sixteen for a year of prep school, thence on to the Ivy League where he was a star athlete. He graduated in 1914 and remained in the East long enough to become romantically involved with a stunningly beautiful New York actress named Marie Carroll. He talked her into coming West and soon they made plans to wed. The engagement was announced at the South Rim of the Grand Canyon.

The wedding never took place. She wanted him to live in New York and he wanted no part of that. "The girl I wound up with," he says with a grin, "is worth a hundred New York actresses. You'd never see a one of them out herdin' cows." The girl he wound up with is a lovely, charming lady named Delia.

Gail met Delia while she was visiting at the ranch of a neighbor. She was from New Mexico but living in Skull Valley. Her father owned Angora goats and for a time, Gail's friends referred to his lady friend as the goat girl. Delia and Gail were married in 1924.

Gail has written literally hundreds of poems about cowboys and their lifestyles, but the most memorable have been *Sierry Petes* and *The Moonshine Steer*.

Gail had the unique distinction of being the first volunteer for the Arizona Rough Riders. It happened back in 1898 just after war was declared on Spain. The new commanding officer of the regiment, Colonel Alexander Brodie, lived just across the street from the Gardner family. Gail, aged six, donned his boots, chaps, hat and toy pistol and marched across the street to the Brodie residence and volunteered his services. Colonel Brodie good naturedly swore young Gail into the regiment. Just in time too, for a minute later his mother beckoned him home for supper on the double, thus ending the shortest term of enlistment in Rough Rider history. 7



THE LODGE, CABANAS BARRANCAS AT DIVISADERO OFFERS ROOM AND MEALS FOR TWO FOR ONLY \$32 (U.S.) PER DAY. THIS RESORT CAN BE REACHED ONLY BY RAIL.

If you feel the need for a little adventure or want to stir up your life a bit, you could try boarding the *Chihuahua al Pacifico* and taking the run to Divisadero on the rim of the Copper Canyon in the rugged Sierra Madre Occidental range of north-central Mexico.

THE HIGH ROAD TO TARAHUMARA-LAND

ARTICLE AND PHOTOGRAPHS BY FRANK HAMMOND

THIS JAUNT will by no means pose the challenge of an assault on the Kanchenjunga in the Himalayas or a jaunt across the Gobi from the Great Khinghans to the Tien Shan, but an overnight stay at Divisadero can be a dramatically memorable experience. A longer stay could be high adventure. For one thing, Divisadero is the midpoint of one of the most spectacular train rides any railway anywhere has to offer. For another, it's the heart of the Tarahumara Indian country, and both the people and the land are genuinely and gloriously primitive.



EQUIPMENT USED BY THE CHIHUAHUA AL PACIFICO IS REASONABLY MODERN AND WELL MAINTAINED.

The only easy way to get there is by train. Billing itself as "the world's most scenic railroad," the *Ferrocarril Chihuahua al Pacifico* follows an incredible route on its way through the Sierra Madre, an extension of our Rockies. It crosses 39 bridges, passes through 86 tunnels, and snakes its way along the edges of countless canyons and mountain peaks.

The line was begun in 1871, and railroad fortunes were squandered in its construction. Both American and European engineers gave up on it as impossible. The incentive to persevere, however, was strong. The Mexican government long wanted to transport sugar and tomatos from the rich agricultural area near Topolobampo on the Gulf Coast to Ojinaga (Presidio) on the Texas-Mexico border, so it bought out the foreign interests in 1953 and put its own engineers to work on the project.

Eight years later in November, 1961, President Lopez Mateos officially opened the railroad at Temoris, 130 miles out of Los Mochis at a spot where the train makes a horseshoe turn on a curved trestle stretching over two rivers, then an opposite turn up through a tunnel to come out on a steep cliff overlooking the Temoris station in the canyon below — and does all this in a mile and a half. There is a sign there commemorating the event, and so, too does almost every bottle of U.S. ketchup for the tomatos in it probably came from Topolobampo.

Different types of trains run on the *Chihuahua al Pacifico*, depending on the day and time of departure. There are sleeping cars with roomettes, just plain passenger cars, and self-propelled Fiat Autovias. The Autovias, which run daily except Wednesdays and Sundays, are the

most suitable for tourist-type travelers. They are faster and have big windows and reclining seats — all reserved. Although these cars show some signs of wear, they are comfortable and very clean. And the fares on this railroad are among the last great bargains on the traveler's earth. From the passenger terminus at Los Mochis to the other at Chihuahua or *vice versa* (it's freight only beyond these points 500 miles apart), the tariff is \$14.50 American money. A sleeper with private roomette is only \$20.00. Although meal service is advertised, it's

undependable so don't count on it. There could be full restaurant dining-car service, or just snack-shop service, or there could be neither. The safest thing is to bring your own provisions. A porter does go through the cars selling beer and soda, however, and vendors may clamber aboard at station stops with tacos, burritos, quesadillas and fruit. But bringing your own lunch is still the safest.

The train stops at villages which can be reached in no way other than foot or by horse or muleback to take on or to discharge passengers. I recall one village especially, about an hour out of Los Mochis. San Blas is as typically colorful a Mexican mountain village as you could ever want to see. It was early in the morning and the village was just beginning to stir into its daily life. Housewives were sweeping out their dirt-floored huts and

THE TRAIN CROSSES 39 BRIDGES, PASSES THROUGH 86 TUNNELS, AND SNAKES ITS WAY ALONG THE EDGES OF COUNTLESS CANYONS.

sprinkling down the dust in front. Young girls were rhythmically patting out the breakfast tortillas and slapping them onto hot rocks; donkeys stood around in flop-eared resignation; trees in full blossom postured decoratively; vendors on the station platform were selling apples, grapefruit, and blankets; buzzards circled anticipatorily above; and looming over the whole scene was the steeple of the village church, painted a blue so bright it challenged the sky.

Such sights are merely the preliminaries. The major attraction is the so-called "Copper Canyon." Actually, only the hardiest adventurers ever see the *real* Copper Canyon with its awesome cliffs, frequently snow-covered, towering 6,000 feet above tropical valleys full of mangos, bananas, and orchids. At Divisadero you will be on the edge of Urique Canyon with

36 rustic but quite comfortable cabins clustered around a central lodge perched on the edge of Urique Canyon. The rate for two including meals is just \$32.00 (U.S.).

The dining room in the lodge where all meals are taken has a magnificent fireplace, big enough to roast an ox. Next to it a great picture window overlooks the world. We had an excellent dinner consisting of soup, a kind of hash (perhaps venison), and beans and tortillas. My wife likes beans and when the bowl ran low she asked for more. We got them. Then in her "flawless" Spanish she asked the young man waiting on our table if we would be having beans for breakfast. He brought another bowl.

It's cold at this mile-high altitude and while we were enjoying dinner, maids and *mozos* built roaring fires in the stoves and fireplaces in our rooms. I piled extra logs on our fire and my wife and I went to bed

waiter placed a great bowl of beans in front of my wife, we all knew that was his way of saying, "Have a good day!"

THE TARAHUMARAS, of which there are about 50,000 living in this area of the Sierra Madre, are a primitive people who speak their own language and live along the mountainsides in caves large enough to hold both them and their livestock at night. In mild weather they live in stone huts along the plateaus. They have no furniture and they sleep on straw mats. They raise goats, sheep and cattle, which they slaughter only at special celebrations such as weddings and births at which they also load up on *tesquino*, an extremely potent corn beer. Their women do most of the work, weaving blankets and braiding baskets while watching the grazing flocks.

I had been in this general area on horseback with some cowboys about forty years before and I could see some changes in tribal ethnics. When I had been here before, the men had all been short — about to my shoulder with hats on — and had worn a kind of Mahatma Gandhi "diaper." Now they are taller and wear jeans and cowboy shirts. Some even have blue eyes and are movie-actor handsome. I can't account for it; I just report it.

Tarahumara translates as "fast feet in the mountains," and these Indians truly are legendary runners. There is a story that once during a time of disaster when Chihuahua was cut off from the rest of the world, a Tarahumara ran the 200 miles to El Paso, Texas, to deliver a message requesting aid. When he was offered hospitalization to rest, he only grunted, drank a cup of coffee, and ran non-stop back to Chihuahua.

During the time of Paavo Nurmi, the great Finnish Olympics distance runner, Tarahumaras were approached to run against him, but they weren't interested in running as a sport. Although they play a kind of kickball game in their bare feet using a wooden ball, a game which sometimes lasts 72 hours, running is purely a bread-and-butter proposition with them. They run down rabbits, gophers, squirrels and the like for food. They also practice a kind of primitive agriculture, and you see patches of corn here and there on slopes so steep you'd guess the seed must have been planted with shotguns.

THE EASIEST WAY to see this wildly beautiful land and its people is to sign on with an escorted tour. If you're coming from the East, you could have your travel agent book



SOME TARAHUMARAS OPERATE SNACK SHOPS, THIS ONE BEING PATRONIZED BY A CUSTOMER WEARING ONE OF THE LOCALLY-MADE \$4 "STETSONS."

nearly sheer drop-offs of 5,000 feet. Urique Canyon is one of five great gorges which make up the Copper Canyon complex. The combined length of these canyons, carved out over the centuries by the creative erosion of the Urique River, would accommodate four of our Grand Canyons of the Colorado with room left for several good-sized gullies.

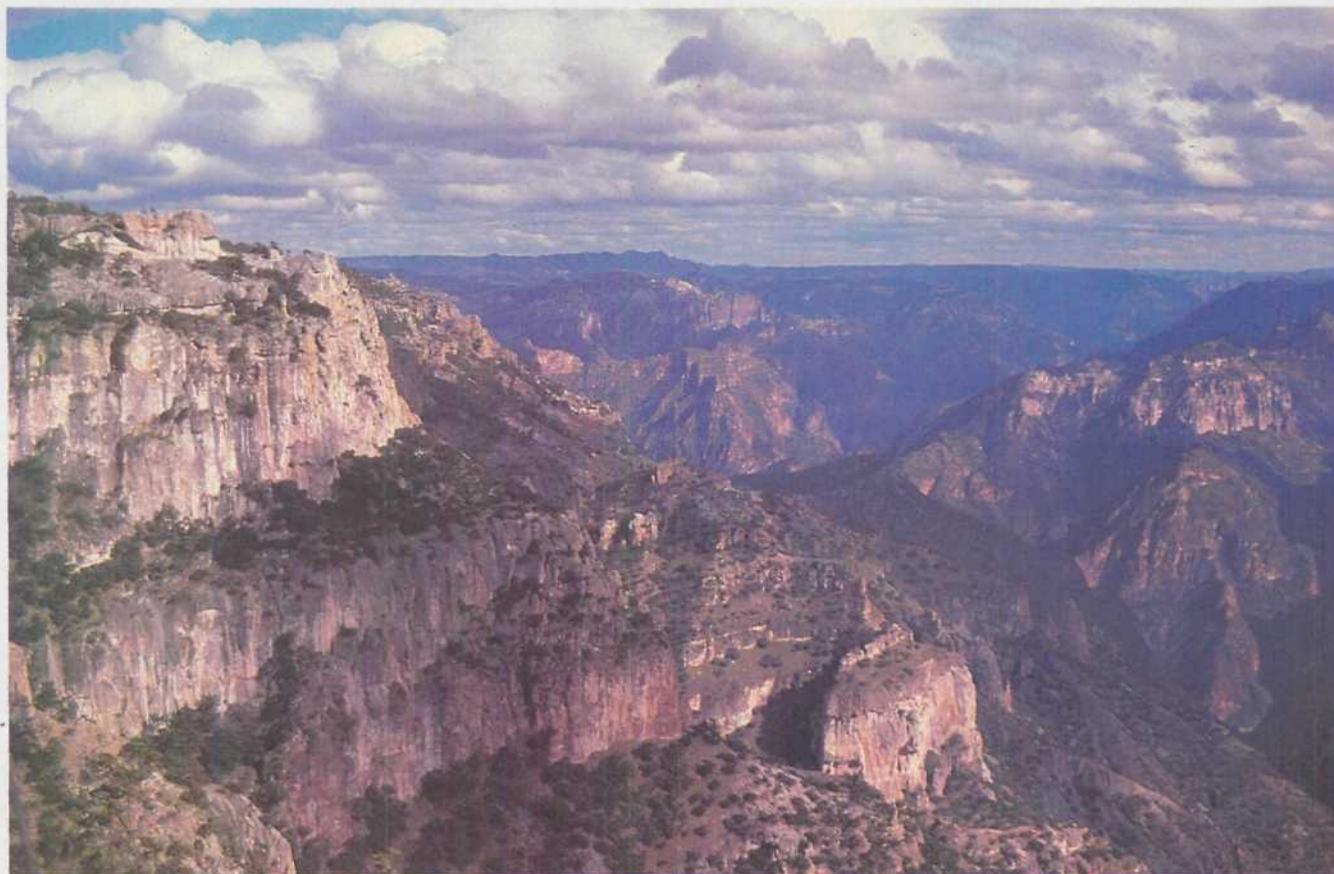
AT DIVISADERO THERE are some recently constructed accommodations called the *Cabanas Divisadero Barrancas*. These are

under a great stack of heavy blankets. Even so, it was so cold in our room the next morning that my moustache wax was frozen in the tube and I had to go to breakfast unspiked.

Awakening took the form of a loud beating of drums by the local staff supplemented by shrill war-whoops from one of our tour group who had leaped from bed and run out of his cabin shouting, "Indians! Indians! Put the luggage in a circle!"

We had *buenos rancheros* for breakfast, and when a smiling young Tarahumara

AT DIVISADERO YOU WILL BE ON THE EDGE OF URIQUE CANYON WITH NEARLY SHEER DROP-OFFS OF 5,000 FEET.

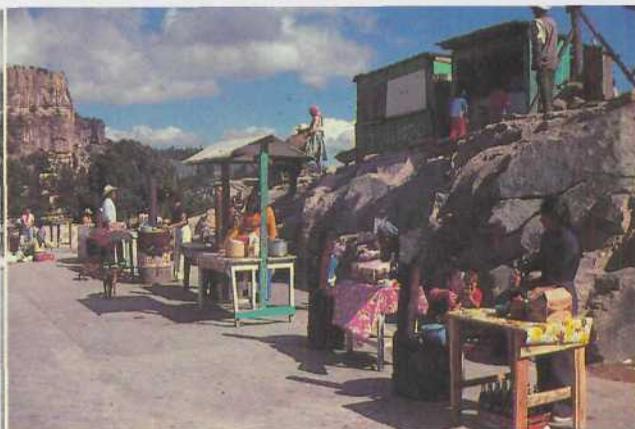


you on one of the Sanborn Escorted Copper Canyon Tours. They leave from either Ojinaga in Chihuahua, across the border from Presidio, Texas, or from Juarez, also in Chihuahua, across from El Paso. From the West, you could look into one of the tours sponsored by Aero-Mexico or one offered by Unitours, the Club Universe people. These deliver you to and then leave from Los Mochis, 480 miles south of Nogales on the Arizona border.

If you prefer to do these things on your own, write to Cabanas Divisadero Barrancas, Box 661, Chihuahua, Chih., Mexico, for reservations and further information. Allow a minimum of six weeks for reply. For complete train schedules, rates and related information write Chihuahua Pacific Railway Company, Traffic Department, P.O. Box 46, Chihuahua, Chih., Mexico.

There is no place on this continent so primitive and beautiful that you can reach so quickly and comfortably as Divisadero and the Copper Canyon country — once you've made it to the starting point. All trains stop at the Divisadero station siding whether the passengers are staying over or going on through; thus, everyone passing by gets to view the magnificent system of gorges.

URIQUE CANYON (ABOVE) IS PART OF THE COPPER CANYON, A SYSTEM LARGE AND DEEP ENOUGH TO SWALLOW FOUR GRAND CANYONS WITH ROOM TO SPARE. IT CAN BE SEEN FROM DIVISADERO STATION (RIGHT).



Overnighters, by arriving one afternoon and leaving at approximately the same time the next, have several hours to hike and to explore. There is a youngish man who plays the guitar and sings in the dining room after dinner, and who was once a soldier in the United States Army stationed at Fort MacArthur in San Pedro, California, who will be glad to take those interested up along a trail offering spectacular views of the canyon with its mile-deep drop-offs to where the Tarahumaras live in caves. For those who can stay several days and who are looking for genuine adventure, pack and saddle horses and guides are available.

There is a gift shop adjoining the Cabanas which sells authentic local crafts, and some of the more enterprising of the still-primitive Tarahumara have set up outdoor stands at the railway siding. My wife bought a hand-woven basket for keeping tortillas warm. She also bought an Indian war drum for she's musically inclined. If, like me, you've got a few years on you and would like to recapture some of the romanticism of your faded youth, you can buy a wide-brimmed, high-crowned, honey-colored, straw cowboy hat for \$4.00. Then when somebody cracks, "Where did you get that hat?" — Tell 'em! 

Tarahumara-Land



Where night is the “Day of the Moon”

Article by CHARLOTTE M. CARDON Photographs by JOHN P. SCHAEFER

Tarahumara women (above), possibly hung-over from *tesquino* and certainly weary from the all-night *matachine* dance, gather around a morning fire.

Tarahumara men (right) are shy and fiercely independent, having absorbed little from their three centuries of exposure to outsiders.



HOW do books, photography exhibits and museum collections come about? This is the question that often provokes the novelist to serious comment and sometimes even to satire, as in Paul Theroux's "Picture Palace." Something must start the creative process and it is rarely just a job assignment.

In a recent interview with author Bernard L. Fontana, a University of Arizona

ethnologist, we asked questions about how he and John P. Schaefer got to Tarahumara country, the source of their latest book.

"The Tarahumara have been extremely well-documented even though these 50,000 Indians live in remote southwestern Chihuahua, Mexico. Their life style, at subsistence level, didn't change even after the coming of the Spaniards in the 17th Century who tried to coerce and convert them," Dr. Fontana explained.

"The ethnologic field work done by the

American Museum of Natural History, UCLA and numerous other universities was qualitatively of the highest order. These notes are available today as well as recent books that are based upon Spanish reports, such as "Raramuri" by Tom Sheridan and Tom Naylor."

This library-type research was most essential for both Fontana and Schaefer to orient themselves to the country they would see when they tackled their project, but it was not the inspiration for the trip.

In the early 1970s an extremely curious high school dropout named Edmond Faubert went into this remote area of Mexico to study the Indians and their customs. He also did some trading and bought Tarahumara crafts to museums in New Mexico. In 1976, he persuaded the Heard Museum in Phoenix, Arizona to put together a show called "The Other Southwest." It included collections he had made while living among the tribes of this northern Mexican region.

It was here, upon invitation, that John Schaefer met Faubert and realized what unusual and not often-seen crafts and daily living patterns these Indians had to offer. If not a "first," it was something in which the University of Arizona might become involved. "Bunny" Fontana saw the possibilities of a book, a permanent collection for the Arizona State Museum in Tucson and a cultural show. There would be tools, clothing, games, baskets, weaving and pottery. The people are known for their long-distance running ("all Indians were good runners" Fontana comments "but only the Raramuri, as they are called in their own Uto-Aztecan language, continue to be fleet of foot and run rather than use beasts of burden"), and for their music played on rattles, rasps, violins, drums, flutes and guitars — eerie but fascinating.

To somehow reach the region that both writer and photographer could explore was the second step. On the western side of the Barranca de Cobre (Raramuri translated means "footrunners of the barrancas"), contact with the Indians has been minimal. Their history is one of withdrawal from the white man. The people are nomads, unfriendly and perhaps hostile to any intrusion. They go deep into the canyons in summer and come higher on the rugged slopes of the mountains during winter. Although hardy souls, they have a high infant mortality rate and live in what by most standards would be considered extreme poverty.

ON the east side of the Continental Divide (these are the Sierra Occidental Mountains), there are mountain meadows and family groups (if not villages) who remain permanently close to their small fields of corn (a diet staple and the basis of a beer called *tesquino*). The mountain habitat is above 6,000 feet and many parts of it are now laced with rough roads as the area is heavily timbered and exploited by Mexicans for lumber. The temperature can reach freezing in winter but the summers are mild. East of Creel and Divisadero where the railway from Los Mochis to the city of Chihuahua stops for visitors to approach the brink of a spectacular canyon, deeper than the Grand Canyon of the Colorado, is the settlement of Panalochi. This eastern upland region drained by the Rio Conchas has pine and oak and good rainfall.

But it requires a small bush plane to easily reach the more remote habitats. On January 6, 1977 (for the Christian service of Epiphany), pilots Ike and Jean Russell took in Bunny Fontana and State Museum photographer Helga Teiwas. It was a hair-raising experience as the short airstrips slope uphill and take-off has to be quick. The valley sides often have rock shelters formed in the soft turf of compacted volcanic ash. Plants and wild animals abound.

Landing on a meadow wasn't quite enough, however, to see the Indians at work and at their religious celebrations. It is necessary to walk. Both Fontana and Schaefer camp out for several days each time they visit. They state "hygienic conditions are terrible as there are sheep and other animals as well as humans polluting all the water supply . . . it is possible to be very ill with dysentery."

"We also have to bring in our own food but the stores in each small community sell crafts as well as a few canned goods and Coca-Cola or its equivalent."

The Indians of this particular region are extremely colorful in dress and make magnificent photographic subjects ("everyone has a shirt made to order, to be picked up on the next visit"). Although the Tarahumara in no way mingle with the present-day Mexicans (the region is 20,000 square miles within Mexico's northern states), some have delicate and handsome Spanish features. They belong to the same linguistic stock as the Mayo, Pima, Papago and Yaqui Indians found in the southwestern part of the United States.

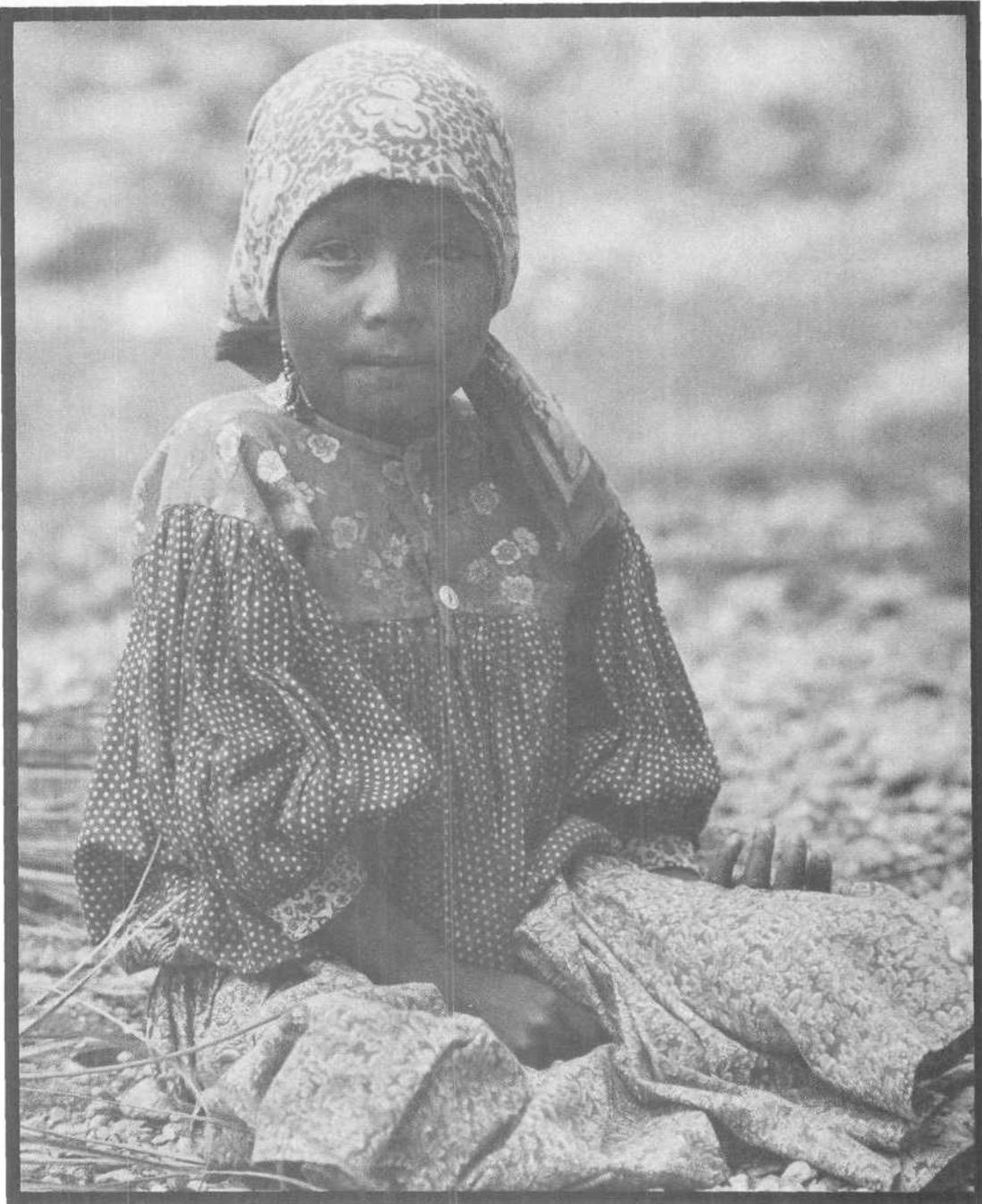
"They are very shy people," Dr. John Schaefer has mentioned, "and they do not wish to be changed by other cultures."

Their religious fiestas are very beautiful as their dress is often many shades of red and yellow prints. Headdress, elaborate



A Tarahumara family scene near Panalochi, Chihuahua. The man examines the fiddle he has just made, the woman shells corn.

The Tarahumara are a stunningly handsome people, affectionate with their children and at peace with one another. Self-sufficient, they traffic very little with the outside world.



with ribbons and masks, resembles those worn in the Passion Plays of the Yaqui tribes. They observe the holidays of the Christian calendar, as the Jesuits have been in the region for several centuries, but mixed with Christianity are primitive "curing" ceremonies. In the 17th Century the Spanish wrote of chanters and shamans who depended on oral tradition as these people had no written language.

There are many tribal dialects which call for an interpreter but some Spanish is spoken, especially by those who go to the stores with their crafts. Perhaps there is even some trading but trading posts created on Indian reservations such as the Hopi, Apachi and Navajo operate do not exist, at least not in any number. The Catholic Church offers free medical clinics, but the people prefer to be completely

self-sufficient if possible.

ALTHOUGH trips will continue into the region, Dr. Fontana's work is finished. He relied after his visits on written records and observation for the text of his two books, "Tarahumara — Where Night is the Day of the Moon" and the "Material World of the Tarahumara."

This is probably just the beginning of available studies on these remarkable people.

"Written material is abundant. We have reprints of all early anthropological studies by numerous scholars from American universities. The University of Texas in El

Paso has a remarkable collection for anyone who wishes to pursue the subject even further," Fontana advises the serious student, "but our collection and show at the University of Arizona will certainly be among the finest. We also have crafts for sale."

As we look around his office and spot not only fine black and white photographic prints but many piles of slide-boxes and collections of polaroid color prints, the runners of the canyons seem very real and close.

"We invited some for our opening at the museum but we didn't have them run . . . it seemed unfair to our local joggers! A few years ago they were invited to participate in the Boston Marathon. When they heard the distance was only 26 miles they sent representatives; they were all women!" **Z**

Elacion

☆THE NOSIEST NEWSPAPER IN THE WEST☆

VOL. 1 NO. 9

MARY EILEEN TWYMAN, EDITOR

OCTOBER 1980

RENO'S BRIDGE OF SIGHS PAYS OFF

by Connie Emerson

Reno, Nevada — Most of us dream of finding buried treasure, but we don't really expect to. Three Reno, Nevada men did, though, and they're still finding it. Darrell Garmann, Walt Dulaney and Jerry Felesina don't head for the hills to pan the streams or tramp the desert with geiger counters like most Nevada prospectors. They put on wetsuits and make for the Truckee River, just a few feet from Reno's Casino Row.

Their treasure hunt began back in the mid-1970s, a few years after Garmann moved to town. He had heard about the tradition which began when Reno was known as "The Divorce Capital of the World." It seems that newly divorced people, after receiving their decrees, walked a block from the county courthouse to the Virginia Street bridge over the Truckee, where they would throw their

wedding bands into the water below.

As soon as he heard the story, Garmann wanted to go after those rings. But there were problems. His wife thought he was crazy and he didn't have a dredge. So he decided to give up the dream for awhile and hunted for deer and chukar in the Nevada hills instead.

When later he was able to buy a dredge for \$300, his hopes were rekindled. Realizing that the salvage job wouldn't work as a one-man

Continued on page 32.



Garmann, Dulaney and Felesina sort over their loot which totals approximately \$30,000 to date.

SEATTLE IS ALIVE AND WELL

Seattle, Wash. — Seattle and King County are trying to dig themselves out of the most unexpected volcano fallout: bad publicity. Even though the area was untouched by ashfall from Mt. St. Helens,

many tourists are cancelling their visits to the area.

The City and County insist that they have been and still are alive and well and "doing business as usual."

"The publicity concerning the devastation around the base of Mt. St. Helens and the ashfall carried to some parts of the state (most of which are now ash-free), has been seriously affecting us," stated Fred Burrow, President of the Seattle/King County Convention and Visitors Bureau.

"Ours is not an ash problem," he continued, "it's a public relations problem. People outside the area think

it's there on our back doorstep."

Seattle is over 100 miles from St. Helens, and the traditional wind patterns have precluded any ashfall or other directly related problems.

"The highways and roads are open all over the state and concern about bad driving conditions should not stop the usual summer travel. If the bad publicity — and incorrect publicity — doesn't stop soon, we could be in for a rough year," Hartly Kruger, Executive Vice President of the Bureau added.

— Desert News Service

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MOONSHINERS MAY SOLVE GAS SHORTAGE

Sacramento, Calif. — In another time and another place, they would have brought the "revenooers" — gimlet-eyed with guns and axes at the ready — in a sweeping raid through the underbrush.

Today, they may be part of the wave of the future.

And so the California Alcohol Fuel Producers Association, dedicated to the exchange of knowledge between backyard producers of alcohol as an automotive and household fuel in the face of a growing world shortage of oil, was recently born in Sacramento.

Bill Withrow, a Sacramento-area real estate broker with a sideline interest in alternate fuels, and Les Wescamp, head the new California organization.

The new Association, Withrow said, is beginning to gather signatures on an initiative intended to foster use of alcohol fuel "and our members already have scored some key successes in the last year in advancing the acceptance of this fuel."

As he spoke, an aluminum and glass device behind him — hot in the Sacramento sunshine — was producing droplets of ethanol from corn mash. Ethanol, as distinguished from methanol which comes from wood alcohol, can be made from any type of growing thing that can be fermented.

"Our device uses an old moonshiner's recipe that requires absolutely no mash cooking," explained Dr. Dean Hoch, president of a suburban Sacramento firm

specializing in "energy-saving and self-sufficiency products."

His firm is typical of the kind of small entrepreneurs which are springing up in many parts of the state as the world looks with increasing concern ahead to the eventual enforced end of its dependence upon petroleum fuels.

"Our backyard still," he pointed out, "is solar-powered, with an electrical heating backup. It is virtually labor-free in operation."

Raw material for such backyard stills, he said, can be anything that will ferment — even household garbage — but the best are those with relatively high sugar content such as corn.

— Palo Verde Valley TIMES

PAYS OFF (cont. from pg. 31)

operation, Garmann enlisted the aid of two friends, Dulaney and Felesina. Since that time, prospecting in the Truckee has been the trio's weekend hobby each summer. Every year they get a free permit from the State Fish and Game Department. Then they take out their equipment — the dredge with its five horsepower Briggs & Stratton engine, a rock hammer and crowbar for moving rocks, a diaphragm compressor and scuba gear.

The crew has been so busy dredging that they haven't gotten around to having appraisals made of many of the items they've uncovered. In fact, they have only begun to sort through the well over one hundred pounds of coins taken from the riverbed. Many of the several hundred rings have not been evaluated either. Three years ago, after two years of part-time weekend treasure hunting, they figured their loot was worth more than \$30,000. And that was well before the price of gold had reached \$200 an ounce.

One diamond ring which has been appraised is worth about \$1,200. Of the coins they have sorted, there's a \$12 penny and dimes worth \$90, \$225 and \$800. At least twenty of the silver dollars are of pre-1971 minting, when these coins contained 900 parts of silver to 100 parts of copper. They've found several gold nuggets, too.

It surprised the men at first that objects other than rings had been thrown from the bridge. Now, after finding such items as a .45 automatic, they're prepared for anything. Some of the articles are real curiosities — a solid silver fertility symbol, for example. There are coins from Tunis, China and Australia, as well as dozens of other countries. Several of these pieces of money date back to the time when now independent countries were protectorates.

The collection of tokens fills several coffee cans. They include slot machine slugs, bus tokens, sales tax tokens, tokens once redeemable for cash and many from casinos which are no longer in opera-

PROHIBITED FISH COSTLY TO PET STORE OWNER

Long Beach, Calif. — A Long Beach pet store owner was assessed a total of \$1,250 in fines and penalties for possession of 55 piranha and one spotted gar, both prohibited fish species in California.

Piranha, which are native to South America east of the Andes, are noted for their voracious feeding habits. They will reportedly attack any animal, including humans, that enter the water where they are present. Their teeth and jaws have been compared to a bear trap. Piranha probably could live in many California waters during summer months and possibly could survive year around in some Southern California waters.

The spotted gar is one of several species of gars, all of which are prohibited in California. Gars are native to Central America, the West

Indies and the eastern United States. All species have needle-sharp teeth set in long jaws. Extremely hardy, they are considered among the most vicious of freshwater fishes, preying upon and competing with game fishes. The spotted gar may grow to five feet in length.

The discovery of the piranha and the spotted gar at Kurt Steindl's Seven Seas Tropical Fish Store was made by accident, when Karen Longmore of Long Beach entered to buy some aquarium supplies.

Longmore, who raises tropical fish as a hobby, also happens to be a Department of Fish and Game warden, although she was off duty at the time. Trained in the identification of prohibited species, she had no trouble spotting a tank full of young piranha — "most of them no bigger than your thumbnail,"

she said — in a corner of the store. The spotted gar, also young but more than a foot long, were also easy to identify.

Longmore took no immediate action but left the store to get in touch with DFG warden Larry St. Clair, also a Long Beach resident. She then returned to the pet store and told the sales clerk she wanted to buy some piranha.

The clerk put his finger to his lips and said, "Sssh. Around here we call them buck-toothed guppies," according to Longmore. She purchased two of the "buck-toothed guppies."

Shortly thereafter, warden St. Clair made the arrest and seized the prohibited fish. The piranha have now been destroyed and the spotted gar are being held for study at the DFG laboratory in Long Beach.

— Desert News Service

tion. And there are medals. One is a Swiss medal which was presented as an award for excellence in design; another commemorates the inaugural run from San Francisco to Chicago of the Santa Fe Railroad's "San Francisco Chief" on June 6, 1954. There is jewelry, most of it 14 or 18 karat gold, including crosses, watches, gold filled teeth, St. Christopher medals, good luck charms and a few items that are unidentifiable.

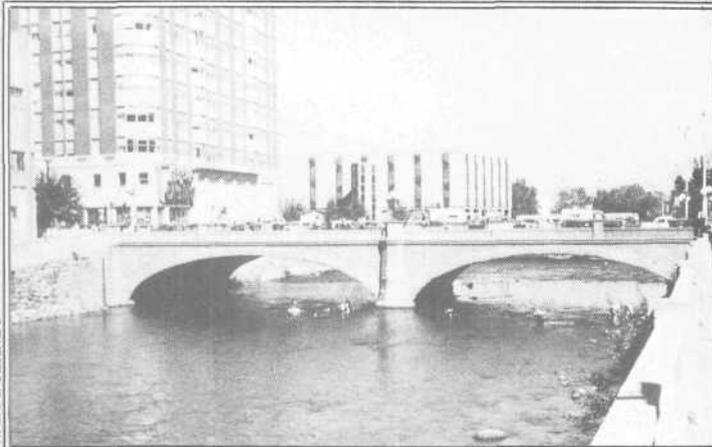
Watch fobs, fashionable in the early 1900s, are among the reminders of bygone eras which have been dredged up. The crew has recovered old keys and an antique lock as well as a red garnet ring which bears the inscription, "Love Is as Strong as Death - 1890."

fish, they've confined their dredging to only a few weekends each year. They figure that they move from eight to eleven yards of gravel in an eight-hour day, going down as far as fifteen feet. Since most of the Truckee's bed becomes hardpan at about three feet, the bulk of their finds haven't required a great deal of sand removal. Choice spots are under rocks and boulders, which usually aren't hard to move once the surrounding silt has been sucked away.

The dredging has proved to be a crowd stopper as tourists walk along the casino-lined street. As many as 150 to 200 spectators have gathered at one time, but the crowds are usually smaller. And the crew keeps them entertained. When they find



A dredge is a costly but essential piece of equipment to hunt treasure under water.



Divorcees once tossed rings and memories over the rail of this bridge on Virginia St. in Reno.

Mounted on two inner-tubes, the dredge works on the vacuum principle, with a four-inch flexible suction hose attached to a pipe which in turn is hooked on to the sluice box. One of the crew, using the scuba gear, scours the bottom of the river with the hose, sucking objects up from the sand into the sluice box. Another crew member periodically inserts a long rod into the pipe to keep it free from obstructions. The third man often snorkels around looking under rocks. About every hour, the sluice box is cleaned out, but items that look interesting are taken from the box for closer inspection whenever they flow into it.

Since the treasure-hunting threesome are all family men who like to camp, hunt and

something particularly interesting, they announce it to the group assembled on the bridge. One morning, Dulaney — the trio's jokester — picked a wedding ring from the sluice box, took out his eye loop and read the inscription aloud. "Love Forever," he exclaimed dramatically, then added a scornful "Hah" and gestured as if to throw the ring back into the tumbling waters again.

Onlookers' reactions are mixed. Some are sceptical. "They'll never find enough there to pay expenses," mused a rheumy-eyed old-timer. "I've lived around here all my life and I know." That was the day the crew uncovered the 1872 dime minted in Carson City that was worth \$800.

—Desert News Service



Jerry Felesina (left) and Darrell Garmann launch their dredge at the start of a day's "prospecting."



A wide variety of valuable objects have been found, these two pieces of gold being false teeth.

WILDLIFE BEING TRAPPED IN NEW CONCRETE CANAL

Calipatria, Calif. - Artificial water holes are being installed along a newly built section of the Coachella Canal in Imperial County to protect burro, mule deer and other wildlife which could become trapped in the unprotected concrete-lined channel.

So far two deer and two burros are known to have died as the result of being trapped in the canal, and a third deer is being held at a veterinarian's office for recuperation. Thirteen other

deer have been rescued, according to officials of the California Department of Fish and Game.

The new canal is being constructed under contract from the Water and Power Resources Service, an agency of the Department of the Interior, to replace an earth-lined canal which has been losing water.

First reports of trouble with wildlife came after water was turned into the new canal to cure the concrete.

The problem arose because

the new canal intersects trails used by burro and mule deer on their way to water. They were attracted to the water in the new facility and upon entering, found they couldn't escape. Deer were able to climb out of the old dirt-lined canal.

Efforts are being made to solve the problem by development of the adjacent waterholes. Other solutions being discussed include permanent fencing and the retention of water in the earth-lined canal when it is put out of service.

In the meantime the Department of Fish and Game and other agencies are maintaining patrols over the area to prevent additional losses.

- The HERALD

ORGANIZERS FILE FORMS TO INCORPORATE THE SAGEBRUSH REBELLION

Carson City, Nev. - Articles of incorporation were filed here recently by 68 persons from four western states for Sagebrush Rebellion, Inc., to protect the historic multiple-use concept of western public lands.

The incorporators include State Sen. Dean Rhoads and Assemblyman John Marvel, the Nevada legislators who co-sponsored the original Sagebrush Rebellion bill claiming 49 million acres for Nevada.

Vernon Ravenscroft of Tuttle, Idaho, a former Idaho legislator, and lobbyist, was elected the first president of the organization, which includes representatives from Idaho, Utah, Nevada and Oregon.

Ravenscroft said the new organization will embark on a program of public education, non-partisan political

action and legal action to preserve the legal and historic private land and water rights, and to expand the role of state government in the management and control of public lands and waters.

The organization has approved filing a suit against the Bureau of Land Management, questioning the adequacy of the Birds of Prey Environmental Study before presentation of that question to Congress.

The organization also approved support to cattlemen and miners in their efforts to avoid massive wilderness classification of western lands and endorsed the League for Advance of States' Equal Rights, a national organization which is recruiting support in Congress for the Nevada lands suits.

- Desert News Service

Cal Tech Prof Says Navajos Should Stay

Pasadena, Calif. - One of the world's leading authorities on population relocation has urged Congress to repeal legislation which will evict some 6,000 Navajo Indians from their tribal reservation.

Dr. Thayer Scudder, professor of anthropology at the California Institute of Technology, said the law requiring the relocation of thousands of Navajos from their traditional homelands, beginning in 1981, "is a fundamental violation of human rights."

The Caltech anthropologist added, "if you force the Navajo to leave their homelands, you are, in effect,

showing them that they have no control over their destiny."

Noting that the principal issue involved here is an intertribal land dispute between the Navajo Indian and the Hopi Indian tribe, Scudder declared that government intervention in purely Indian affairs was exacerbating the dispute and serving neither tribe.

Scudder urged that Congress and the Bureau of Indian Affairs allow both tribes more time to reach acceptable agreements through tribal negotiations rather than through government edict.

- Desert News Service

TANK CAMP REMNANTS STILL VISIBLE

Blythe, Calif. - History is waiting in the desert north of Blythe for those who would like to see the remnants of a large camp reportedly commanded by General George Patton during World War II.

Features of the site are two altars built of native stone, a map of the Southern California area carved into the desert soil, and an intricate system of stone-lined paths.

The easiest way to reach the site (recommended for two-wheel drive vehicles) is via Iron Mountain. Drive north from Blythe to Rice, turn left on state Route 62, and then turn right at the Iron Mountain road.

In Iron Mountain, bear left and take the dirt power line road to the east. Take the second dirt road to the left (south). This road is well-

defined and quite sandy, but easily passable with a standard passenger car in good weather.

A short drive south (less than a mile) will bring the traveler to the northwest corner of the site. The tall altar should be visible from this corner. After a short drive to the west on a road which gets considerably rougher than so far experienced, the map will

be clearly visible from the road. Even further from the road, the second altar will be visible, but only if one is watching closely.

Entry points all along the perimeter lead into the camp, where one finds the rock-lined paths, items discarded by the former residents, and occasional barrel cactus.

- Palo Verde Times

DESERT TORTOISE REFUGE DEDICATED

California City, Calif. — The Desert Tortoise Natural Area, five and one-half miles north of California City, was the scene of a dedication cere-

mony late this spring.

The area contains an extremely high density of desert tortoises; there are at least 200 per square mile in some

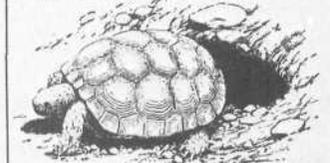
parts of the natural area. This density is the highest known in the geographic range which consists of California, Utah, Nevada, Arizona and northwest New Mexico.

The area has an ideal environment for the desert tortoise's survival. It is a diverse plant community, primarily creosote bush scrub, containing 160 species of plants, 104 of which are annuals. The desert tortoise thrives on the latter in the spring and sometimes again in the fall.

March to May usually is the tortoise's most active time. For other months of the year, the tortoise stays underground in burrows, protected from extreme desert temperatures and an inadequate food supply. The accumulation of fat and storage of water sustains the tortoise from one

feeding period to the next. The tortoise can live sixty to 100 years, reaching maturity at about fourteen to twenty years. Individuals may reach a length of about fifteen inches.

Studies indicate the populations of this reptile have declined. The reduction can be attributed to many factors. Although the desert tortoise is long-lived, it has a low reproductive potential. Eggs are not always laid each year, and once hatched, are left to their own survival. Since their shells don't harden for the first four to five years of life, the tortoises are an easy target for predators.



The desert tortoise is honored as the California State Reptile. Its roots can be traced to more than 200 million years ago—before the existence of dinosaurs. The development of the Desert Tortoise Natural Area will make it possible for the public to appreciate this remarkable member of the California Desert wildlife community.

—Desert News Service

Eagles Planted On Catalina

Catalina Island, Calif. — Six juvenile bald eagles will take flight from manmade nests on Santa Catalina Island, in an attempt to reestablish a resident population after an absence of 31 years.

The birds are nestlings taken from the San Juan Islands in Washington and brought to Catalina by airplane in June.

There, they have been placed in three nests — two birds to the nest — located in

habitat known to be preferred by nesting bald eagles.

At least 25 pairs of bald eagles were known to have nested on the Channel Islands at one time in the past, but the last known successful nesting occurred in 1949. The islands have suitable nest sites for bald eagles in trees and on cliffs and the availability of a plentiful food supply — fish and carrion.

— Desert News Service

PHONY DIAMONDS FOOL TONOPAHANS

Tonopah, Nev. — Although Nevada has long been noted for its rich mines, the state has also had a reputation for phony mining schemes, stock promotions and other such "games" designed to separate the unwary from their money.

One of the most bizarre promotions on record took place in Tonopah during the summer of 1905 with the arrival of E. W. Hews, a lean, nervous, professorial sort, much given to mumbling about scientific formulae and lecturing on geology.

According to an interview he gave to a reporter from the *Tonopah Sun* on July 22, he related that he had staked out a diamond claim near Magnet Mountain on the Silver Bow Road some three and one half miles northeast of town.

In his conversations around town, Hews seemed so scientifically erudite and assured that he raised a fever among the miners, and a large number of them left for the area a few hours after the *Sun's* story hit the streets.

Hews had meanwhile taken the next step in the promotion and said that the find was worth at least

\$5,000,000 and that he had optioned one-third of it to San Francisco investors.

Word from the first locators had it that diamonds could be seen sparkling on the ground and one man, somewhat skeptical when he first went out, announced that he would not take \$50,000 for his claim.

Townsite promotion had gotten underway and two communities, Ladysmith and Kimberly, were laid out. Tents and rough sagebrush huts went up, and the first locators armed themselves against claim jumpers. On July 26, the first business in Ladysmith, a tent saloon owned by Mark A. Boren, went up on the main street and other Tonopah residents were planning on starting restaurants, grocery stores and brokerage houses as soon as the authenticity of the diamonds could be verified.

Sample "diamonds" were being sent out to several experts and a Dr. William F. Boylan of Tonopah brought some to Carson City where they were assayed by T. G. Farrer. He said that the samples were genuine, but believed that they had been

"planted" in furtherance of a mining hoax.

Other reports were inconclusive, and Captain John N. Hassel, who had worked in the diamond fields of South Africa, was brought to Tonopah from nearby Columbia. Hassell brought along an Afrikaner friend, John Shay, and the two did a test on Hews' samples. Hassell heated one stone, dipped it in water and tried to lift it out with tweezers, but it had disappeared. He then declared the stone was a form of silica or topaz.

When word of his conclusion reached Hews and the townsite promoters, they demanded that other tests be made but Hassell had left town by that time. Those who had invested in townsite lots in Ladysmith and Kimberly demanded their money back.

The tent cities folded almost overnight, and soon nothing remained of the great diamond rush but tattered bits of canvas, broken whiskey bottles and rusty tin cans.



by Phillip I. Earl
— Nevada State Historical Society

Study To Begin At Saval Ranch

Tonopah, Nev. — Knowledge of how cattle respond to varying rangeland management practices, and of the kinds of plants cattle seek on ranges based on time of year, should be expanded with a soon-to-be-launched study on Elko County's Saval ranch.

"Hopefully, the work will add considerably to the growing body of information on all aspects of cattle use of rangelands, particularly public ranges," said Rena Armstrong, animal scientist at the College of Agriculture, University of Nevada, Reno, who will be involved in the upcoming five-year study. It is expected that the actual work will commence in October of this year.

— Reese River REVELLE

THE DESERT ROCKHOUND



by James R. Mitchell

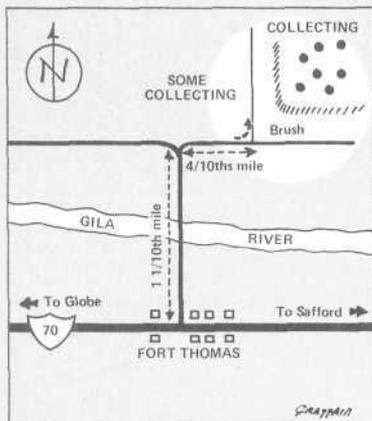
Collecting Sites Update:

The Ramirez Ranch, near Zapata, Texas, will be open to collecting again this year, from October 1 through April 25. The hours will be 9:00 a.m. to 5:30 p.m., except Sundays, when collecting can commence at 1:00 p.m. The fee, at this well known site, is \$3.00 per day, per person, and it must be paid at the Falcon Rock and Jewelry Shop in Zapata. The collector can find outstanding specimens of Rio Grande moss agate, jasper, Montana type agate, petrified wood and black agate, with excellent white inclusions. No digging is necessary, since material is easily obtained on the surface and is, for the most part, of very good quality. The location is only seven miles from town, and one mile off Highway 83. For more information, contact Charleen C. Melton, P.O. Box 464, Zapata, TX 78076.

Jasper, agate, perlite, banded rhyolite, jasp-agate, lace-agate, chalcodony roses and even a few pieces of fire agate, can be found in the dirt cliffs just north of Fort Thomas, Arizona. To get to this site, take Highway 70 to Fort Thomas, turning north on the road heading toward the hills. Travel approximately one and one-tenth miles, crossing the Gila River, and you will be at a fork in the road. Turn right, go another four-tenths of a mile, then turn left and park, near the base of the shallow cliffs. It is throughout these sedimentary hills and the adjacent washes that the material can be found. The variety and concentrations vary radically from hill to hill, some spots being much better than others. This collecting location extends for quite a distance throughout these deposits and is well worth visiting.

New Equipment: Ultra Tec,

1025 E. Chestnut Avenue, Santa Ana, California 92701, has announced the addition of a new Lap Scoring Tool to its line of faceting supplies. This tool is suitable for the scoring of tin polishing laps, a technique which is recommended for increasing the speed of polishing faceted stones. It is compatible with any faceting equipment, is very fast and easy to use. The scoring is performed by pressing it against the rotating lap, resulting in a knurled type surface. This provides pockets for the polishing powder, so that the high points have a suitable supply. This approach is reported to speed the polishing operation from two to four times. The tool sells for \$21 and is available in most lapidary shops, or directly from Ultra Tec.



Publications: Del Oeste Press has announced the publication of their new book, *Gold Prospector's Handbook*, by Jack Black. It includes chapters on dredges, placer and lode prospecting, concentration methods, dry washing, sampling, tools, geology and mineralogy, as related to gold, and an extensive glossary. It is written for people serious about prospecting and does not follow the format of the traditional, souvenir store books, which, in their superficial way, include everything

from first aid to picnic locations. For more information, contact Del Oeste Press, P.O. Box 397, Tarzana, CA 91356. It sells for \$6.95, plus shipping charges.

The sixth annual edition of the *Gem and Jewellery Year Book* is now available. This 1980 edition covers 38 countries and has become an excellent reference book. It contains information on all aspects of gems and jewelry, from mining to sales. There are many photographs, maps and charts, as well as a who's who section, and a list of contacts in the field. For information about ordering, contact the Gem and Jewellery Information Centre of India, Journal House, A-05, Janta Colony, Jaipur 302 004, India. Be sure to place the proper postage on your inquiry.

Helpful Hints: Beautiful blond tigereye cabochons can be made through a relatively simple process, outlined in the Oil Belt Rockhounds' newsletter. Simply cut and polish good quality tigereye as you normally would, and then place in a solution of hydrochloric acid for several days. The acid will bleach it, turning the standard gold into a very attractive blond color, while still preserving the chatoyancy. Be very careful with the acid, though, since it can damage furniture and cause burns.

Petrified palm root has long been a favorite of rockhounds, because of the interesting patterns that can be obtained. The Wickenburg Gem and Mineral Society has pointed out the versatility of this material for making a wide variety of unusual polished pieces, all being dependent on how it is cut. If you slice down the center, parallel to the fiber, the results will look like petrified wood, having a grain, and often a beautiful silky appearance. If,

on the other hand, you cut it perpendicular to the fiber, you can obtain the well-known round "eyes" which have made this root such a prize for so many years. Another variation is to cut diagonally. The greater the angle to the perpendicular, the more elongated the "eyes" will become. The resulting, deformed circles make very unusual pieces, especially in the larger sizes. Excellent displays have been made showing samples of palm cut in a variety of orientations.

Prospecting Expedition:

Have you ever wanted to accompany a real prospector to learn the fundamentals? Bill Cate, successful author and prospector will be taking a group to search for, among other things, gold, in the deserts of Arizona, from January 11 through January 24, 1981. They will take a number of short trips into some remote, scantily explored locations during the expedition. Participants will be given instructions about basic geology, mining methods, and techniques used by prospectors. An opportunity will also be given to conduct field tests on materials found, and, if you are lucky enough to discover something of value, help will be given in filing a claim. For more information, contact William Cate, P.O. Box 1160, Pacifica, CA 94044. The cost, for two weeks, is \$650, and it is \$375 if you can only stay one week.

Shows: The Carlsbad Roadrunner Gem and Mineral Club of Carlsbad, New Mexico, will hold their annual show at the State Desert Gardens Park, from October 10th through October 12th. The hours will be from 6:00 p.m. until 10:00 p.m. on the 10th, from 8:00 a.m. until 10:00 p.m. on the 11th and from 8:00 a.m. until 5:00 p.m. on the 12th.



DESERT CALENDAR

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

Oct. 1-31: Brigham City, Utah. Utah Arts Council — "Utah 80." Juried exhibit of paintings, plus stichery handworks. Brigham City Museum/Gallery. For further information, call (804) 723-6769.

Oct. 4: San Rafael, Calif. Sunny Hills Grape Festival. Handicrafts, grape booth, live music, wine tasting all day, hot-air balloon show. Held at Northgate Mall off U.S. 101 (take Terra Linda Exit). Hours 10-4.

Oct. 4-5: Santa Fe, New Mexico. The Old Cienega Village Museum at Rancho de las Golindrinas, south of Santa Fe, will hold the Annual Harvest Festival on Saturday & Sunday, October 4 & 5, 9 am - 4 pm each day. The Festival is a celebration of the fall's harvested crops and new born animals along with a Procession de San Ysidro. There will be demonstrations of ristra stringing, bread baking in hornos, dyeing and spinning wool, weaving, blacksmithing, grinding flour, plus many other crafts. A memorial will be dedicated on Saturday afternoon to Juan Bautista De Anza. For further information, contact Vickie Weiser, Route 2, Box 214, Santa Fe, NM 87501. (505) 471-2261.

October 4-5: Manufacturers and exhibitors, along with visitors from out of state should make plans now for the 13th Annual National Prospectors and Treasure Hunters Convention at Follows Camp, Azusa, Calif. This location is 30 miles east of Los Angeles off I-10 or U.S.-66. Rig and Table displays are free on a first-come basis, with advance reservations required. Contact Jean Glick, Chmn., 21106 S. Denker Ave., Torrance, CA 90501. (213) 320-5061.

October 10-13: Havasupai Expedition, complete bus charter out of Phoenix. \$352.00 per person, \$327.00 kids 12 and under. Maximum 36. Deposit of \$50 to hold reservation. For information or reservations contact Dana W. Burden, P.O. Box 1256, Wickenburg, AZ 85358. (602) 684-2672.

Oct. 11-12: Kern River Valley Historical Society will hold its annual Antiques and Collectibles Show Sat. and Sun., Oct. 11 and 12, in the auditorium of the Kernville Elementary School. Doors will be open from 10 a.m. to 5 p.m. Admission free. A

country store will feature hand-made items of all kinds.

Oct. 11-12: The World-of-Rockhounds Association is having their annual meeting near Cadiz, Calif. Everyone who enjoys the desert is invited to come. Starting early Saturday morning, events planned include displays, general meeting, conducted field trips, informal discussions, an auction and campfire. Association's attorney will tell progress made by his law firm in keeping public lands open and accessible. Campsite is 63 miles west of Needles. For further information contact Bill McGuire, 27975 Washington, Romoland, CA 92380, (714) 926-2519, or Leona Wheeler, 16624 California Ave., Bellflower, CA 90706 (213) 866-5535.

October 18-19: Coalinga Rockhound's Society Annual Show, "Jasper Days." Sunset School Cafeteria, Baker St., Coalinga, Calif. Field trips, dealers, camping, etc. For information, contact Virginia Hawkins, Chmn., P.O. Box 652, Coalinga, CA 93210.

October 20-26: Major desert paintings of Kathi Hilton will be exhibited at the Riverside District Office, Bureau of Land Management. Public showings will be from 2-8 p.m. weekdays, and noon to 4 p.m. Saturday and Sunday. An open house and special program is scheduled Friday, October 24. For details, contact De Loris "Pete" Palmer at (714) 787-1424.

October 24-26: The Tucson Lapidary and Gem Show hosted by Old Pueblo Lapidary Club will be held at the Tucson Community Center Exhibition Hall, downtown Tucson. Hours: Friday 1 p.m. to 9 p.m., Saturday 10 a.m. to 9 p.m. and Sunday 10 a.m. to 5 p.m. Numerous displays by well known artisans, dealers, members and guest exhibitors. For details contact Bailey Battiste, Chmn., P.O. Box 2163, Tucson, AZ 85702.

Nov. 1-2: Annual "Wonderful Weekend in Twentynine Palms," in Twentynine Palms, Calif. at the Junior High School on Utah Trail, and the Art Gallery on Cottonwood Drive. Combines Gem and Mineral Show, Weed and Flower Show, Smorgasbord, Art Show and other activities. Free admission to exhibits and free parking. For further information, contact Twentynine Palms Garden Club, P.O. Box 934, Twentynine Palms, CA 92277.

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OPEN SEASON ON PLENTIFUL RABBIT

Long Beach, Calif. — California's rabbit season opened July 1 and the hunting so far has been excellent.

Last winter's rainstorms did considerable damage at the time but they resulted in good water and forage conditions this spring. Rabbit populations have responded with increased numbers and good hunters should be able to bag as many as they can use.

The season on brush, cottontail and pigmy rabbits and varying hare will continue through Jan. 25, 1981, statewide with a bag limit of five per day and in possession in the aggregate of all species. Exceptions are the counties of Lassen, Modoc, Shasta and Siskiyou, where rabbit numbers are extremely high and the bag limit is ten per day and in possession.

Jackrabbit season is open

all year statewide with no bag or possession limit.

In general, rabbit hunting this year should be excellent throughout the high desert, along rivers and streams, in brushy areas and in and around agricultural fields.

High desert areas in southern California where hunters should find plenty of action include Lucerne Valley, Apple Valley, Victor Valley and the New York and Providence Mountains, all in San Bernardino County.

Working the edges of irrigated fields in the valleys should turn up plenty of cottontails and jackrabbits. The foothills of the San Bernardino Mountains are also good prospects.

Hunting is likely to be productive in the irrigated farm valleys, around Temecula and Elsinore, and in the brushy areas around farmlands.

The Lake Perris State Recreation Area is closed to upland game hunting, including rabbits, until after Labor Day. This year the opening day has been set for Saturday, Sept. 6.

Rabbit numbers are so high in agricultural areas that farmers and ranchers may be experiencing considerable crop depredation and may be willing to allow access to their lands for rabbit hunting.

Along the lower Colorado River rabbits are just about everywhere. Brushlands along the river, the area of farmlands in the Palo Verde and Bard Valleys, and the desert edges adjoining the valleys all have rabbits in abundance.

Shooting hours for rabbits are one-half hour before sunrise to one-half hour after sunset.

—Desert News Service

MINE STALLED BY BUREAUCRATIC BUMBLING

Tucson, Arizona — After waiting since 1974 for approval of a land trade with the U.S. Forest Service, Anamax Mining Co. faces more delays before work can begin on a copper mine in the Santa Rita Mountains.

Anamax wants 13,000 acres at the old mining and ranching mountain range 40 miles southeast of Tucson.

Forest Service officials have supported a land exchange with Anamax, and studies have shown a mine there would have no more than nominal effects on the environment.

But some long-gone residents of the area are delaying final approval for the mine's development. The 13,000 acres include hundreds of ancient Indian habitation sites, and federal officials said more cultural resource studies are needed before approval can be given.

"We have found significant archaeological sites out there, several hundred of them," said Don Wood, a Forest Service archaeologist. He explained that use of the word "significant" does not necessarily mean extremely important or unique.

"It's anything that will yield information as to history or prehistory," Wood said. "It's sort of an arbitrary type of thing. I suppose in most

people's eyes, it's just a bit of pottery underground."

But until archaeological studies there can be completed, it appears the land exchange and development of the mine will be delayed.

Anamax has helped finance those studies, which are being conducted by the Arizona State Museum at the University of Arizona. After the Museum's initial budget for the work ran out, Anamax pitched in.

"We gave the State Museum additional funds of \$77,000 to complete this study, which required an additional 12 months," Anamax lawyer Ray B. Olson told a congressional subcommittee at a hearing recently.

"This resulted in a proposal for a more detailed study and tests costing \$123,500, and requiring 11 additional months," he said.

Now a preliminary report on the Museum's study to be released next month says up to \$1 million must be spent, with a three- to four-year delay for more study, excavation and removal of the artifacts, Olson said.

"If the company does not approve," he said, "it is likely that the land exchange will be rejected."

— Western PROSPECTOR & MINER

CONGRESS RESTORES PAIUTE INDIANS TO FULL TRIBAL STATUS

Washington, D.C. — The U.S. Senate has passed a bill restoring the Paiute Indians of southern Utah to full tribal status and similar action is expected when the bill reaches the House of Representatives. The legislation will make Utah's Paiutes eligible for the full federal benefits allowed sovereign American tribes.

The Shivwits Band of Pai-

utes broke the stalemate of 20 years by allowing the government to designate some Shivwits land as trust land for all the bands. Indians receive special government health care, education, and employment opportunity benefits only when they live on or near their tribe's reservation.

— Desert News Service

Ultraviolet Reaction Colors Old Glass Purple

Hemet, Calif. — In the old days, world-wide glass industries used great quantities of beach sand in the manufacture of their products. This sand contains many impurities, among them substantial amounts of manganese — 6,222,000 tons per square mile of sea water. It is the reaction of this metal to the ultraviolet rays of the sun

which turns glass purple. It is also the same process that builds so called "desert varnish" on the manganese-rich rocks of the desert. Today, most glass is produced by crushing pure quartz rock. Such glass exposed to the sun will change to amber in color.

— Desert News Service

PLANTS OF THE SOUTHWEST

The title of our new product column this month is also the name of the company in Santa Fe, New Mexico that packages this product. From them you can get many of the gorgeous flowers and useful plants that you see pictured in this and every other issue of *Desert* Magazine. Rather, they'll send you the seeds; you must do the rest.

Plants etc.'s modest mailer says: "We are pleased to offer some of the finest native trees, shrubs, wildflowers and grasses of the west." Not until the last page, though, did it get to the sell line that intrigued us:

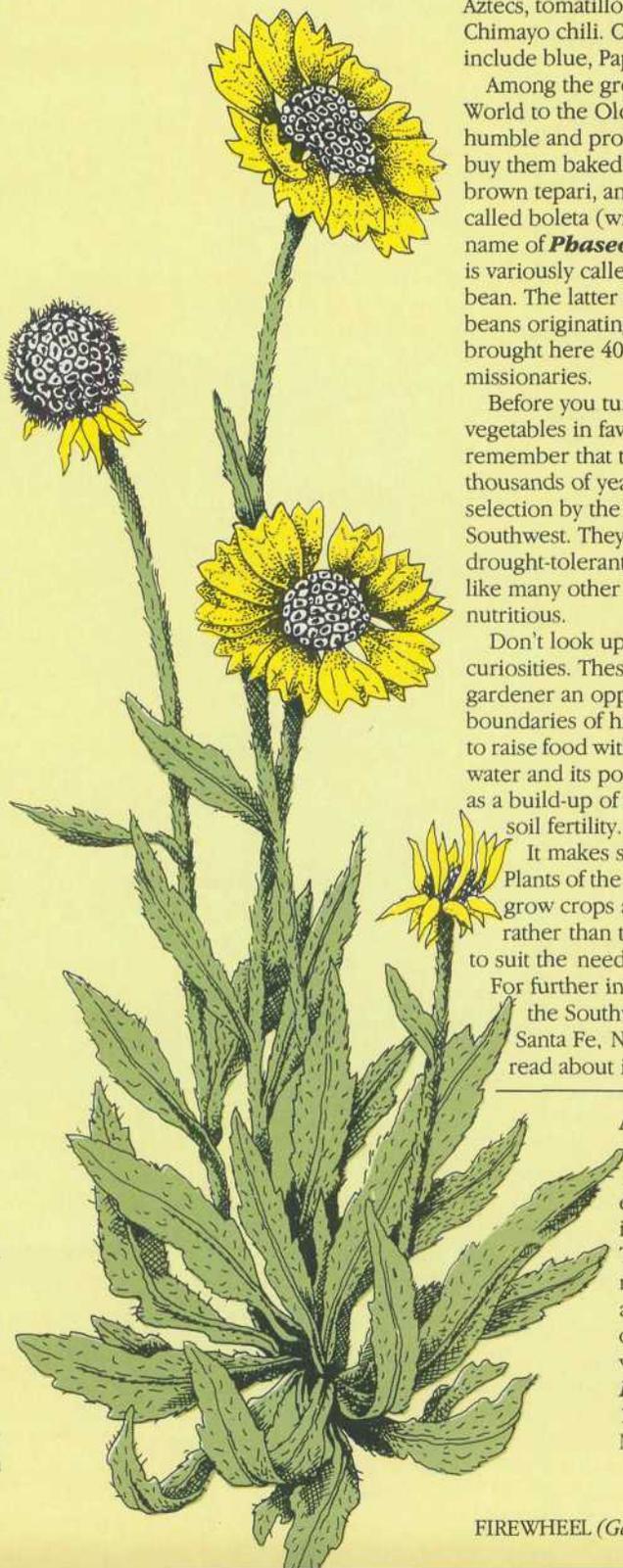
"Gardeners throughout the Southwest and the Rocky Mountain states are discovering the pleasure of meadows surrounding their homes as a substitute for labor intensive and water expensive lawns. A mixture of wildflowers and unmowed native grasses creates a home landscape which blends into the natural environment."

Let's look at the content of a \$4.00 packet of Meadow Mix No. 18 which is suitable for a mild winter desert climate such as is found around Phoenix, Arizona and in Southern California. This one, intended for fall or spring planting includes such tall exotics as Texas plume, scarlet larkspur, blue bells, Mexican hat and firewheel. It works best sowed with native grasses which run from \$2.00 to \$7.60 per pound of blend.

If you did live in Phoenix or Southern California, No. 18 could be mixed the \$6.00-per-pound Dryland Blend. So, added to the flowers, you'd have blue grama, side-oats grama, little bluestem, galleta, Indian ricegrass, smooth brome, fairway crested wheatgrass, pubescent wheatgrass, intermediate wheatgrass and annual ryegrass. The result at one pound of mix for each 2,000 square feet would be a low maintenance natural ground cover that never needs mowing. For reclamation only, ten pounds of mix does for an acre.

"Pueblo Brand" wild vegetable seeds for 75 cents a packet include some that would keep your guests talking about your party for months.

For example, those who were intrigued by Wayne P. Armstrong's article, "A Gourmet's Guide to Unicorns," in the February, 1980 issue of this magazine but didn't want to pick the devil's claws in their wild state can buy them in seed form from Plants of the Southwest along with amaranth, the ancient grain crop of the



Aztecs, tomatillo, and the legendary Chimayo chili. Corn varieties offered include blue, Papago and white posole.

Among the greatest gifts from the New World to the Old, says Plants etc., is the humble and productive bean. You can't buy them baked but you can get white or brown tepari, an adaptation of the pinto called boleta (with the intriguing scientific name of *Phaseolus vulgaris*), and what is variously called havas, fava or horse bean. The latter actually is one of the few beans originating in the Old World and brought here 400 years ago by the Spanish missionaries.

Before you turn up your nose at these vegetables in favor of Burpee's latest, remember that they are the products of thousands of years of breeding and selection by the indigenous peoples of the Southwest. They are some of the most drought-tolerant food crops known and, like many other desert plants, very nutritious.

Don't look upon them as historical curiosities. These crops offer the desert gardener an opportunity to live within the boundaries of his harsh environment and to raise food without the extravagant use of water and its possible consequences, such as a build-up of salinity and depletion of soil fertility.

It makes simple ecological sanity, as Plants of the Southwest points out, to grow crops adapted to the environment rather than to modify the environment to suit the needs of unnatural crops.

For further information, write Plants of the Southwest, 1570 Pacheco St., Santa Fe, NM 87501. Please say you read about it in *Desert* Magazine.

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Magazine will be glad to evaluate your product for inclusion in this column. The only rules are that it be new, commercially available and of specific interest to our readers. For details, write New Products Editor, *Desert* Magazine, P.O. Box 1318, Palm Desert, CA 92261. No phone calls, please.



Damn! We've Got Gophers

by Susan Durr Nix

Consider the plight of the gopher. For 25 million years he has ranged western North America from Canada to Mexico, his main worry the occasional owl or snake or coyote lurking around the entrance to his burrow. Then, about 200 years ago he ran afoul of the home gardener, who has been single-mindedly bent on exterminating him ever since.

It's not a fair fight. Nothing in his evolutionary history has prepared him for "Quick Action Gopher Tabs" or "Giant Destroyer — The Effective Rapid Gas Killer with Formula S." The sanctuary of his burrow has been violated and for the present, at least, the gopher is a hapless victim.

Of course from our standpoint the little vandal deserves every trap, poison, gas bomb, flood, bludgeoning and dirty trick we can dream up. The cheeky beast has left mounds, like calling cards, all over the place. How dare he — on *our* lawn! In plain sight!

He dares because he must. A gopher — more precisely a pocket gopher — is the only rodent totally committed to a fossorial, or burrowing, existence. (Moles, whose habits are similar and which Easterners mistake for gophers, are insectivores, not rodents). Everything about a pocket gopher's stocky, bullet-shaped body, from his greatly elongated front teeth to the tip of his short tail, is designed for underground survival. He gathers and stores food, mates, nests, fights, escapes predators and finds protection from climatic extremes while isolated in 200 to 500 feet of tunnels and living rooms a foot or two below ground level.

Pocket gophers are tireless diggers, capable of burrowing hundreds of feet in a non-stop search for the succulent roots and tubers on which they subsist. Even with larders filled to capacity, they cannot relax. A lazy gopher dooms himself to eventual starvation because his rodent teeth, fashioned for gnawing, grow a prodigious

nine to twenty inches a year and would quickly become crippling liabilities without the constant friction of harvesting and digging to wear them down to a manageable length.



These animals rarely make an appearance above ground where they are virtually defenseless, so few people have ever seen one. The poor eyesight and hearing that make them easy prey out of their own element are not handicaps underground, however, for his tail is all a gopher needs to warn him of danger. The bare tail tip is a sensory organ which alerts him to any movement inside the burrow. Holding it just off the ground, the gopher can safely run backward as rapidly as he runs forward into the refuge of deep living chambers or the long shallow shafts he uses for food gathering. Badgers and bull snakes are among the few predators capable of sustained pursuit. Also called gopher snakes (either because they take refuge in burrows when threatened or because they eat gophers), bull snakes dig into a plugged burrow by loosening the earth with their heads, catching it in the crook of their necks and hooking it backwards.

Pocket gophers are most vulnerable when they are clearing their burrows of soil loosened in the course of excavating. Three strong claws on each forepaw do much of the digging, reportedly at such a

furious pace that they make an audible buzzing sound. These claws are so long that they are folded under against the soles of the front feet when a gopher is merely walking. Hard earth and rocks are loosened with the chisel-like incisors, but he never gets a mouthful of dirt because his lips close completely behind his teeth. This is just one of his special dirt-coping adaptations. His fur is dirt repellent, a thick fluid protects his eyes, and his ears are closed off by valves.

Loose dirt is swept under the gopher's belly and kicked back by his hind paws. Then the clean-up operation begins. As he can't turn around in his narrow tunnel, he sticks his nose between his legs and turns a somersault. Bracing himself with his hind feet, he joins his forepaws in front of his nose and bulldozes the dirt in short spurts to the nearest exit, where it is deposited in a fan shaped pile. When the digging zone becomes inconveniently far from the exit tunnel, a new shaft is excavated. The observed consequence, of course, is uniform dirt piles all over the lawn. Shaft outlets are never left open. Gophers take care to plug them up to keep intruders out and to maintain a comfortable temperature and humidity in the burrow system. In a fresh mound, these dirt plugs are well defined.

Once in a while a foolhardy pocket gopher will risk a nibble off a plant immediately outside a tunnel, but he is far more likely to confine his foraging to roots and bulbs, or to harvest the entire plant by pulling it down into his burrow. Food is cut up and stuffed into fur-lined cheek pouches or pockets, which close with drawstring-like muscles to keep dirt out. Pockets full, the gopher scurries off to one of his storage chambers and deposits the load by means of muscles that pull the back of the pouches forward and empty them out. A fully everted pocket looks like a small pillow case.

During a drought or after a severe flood, adult pocket gophers may be driven above ground to look for new quarters and

during the mating season, a lusty male may tempt Providence to find a mate's burrow. More usually, however, a male locates a female by means of underground vibrations or odors and burrows through to her. This is the only time that one pocket gopher tolerates another one. These animals are violently territorial: young gophers are kicked out of the burrow at two months of age. When tunnels intersect, they are immediately plugged up and should an accidental meeting occur, it invariably leads to a mortal battle, regardless of the sex or age of the combatants. A gopher can inflict savage bites, capable of cutting deep into the toe of a heavy leather boot.

In rocky terrain with little soil to burrow through, gophers are apt to be rare. But they live almost anywhere else, including the desert where burrowing is a common escape from heat and aridity, and where many plants have those tuberous water-storing roots that are a pocket gopher's cup of tea. In fact, according to the Division of Agricultural Sciences of the University of California, they are more adaptable than any other rodent group, ranging from the coast to inland plains and valleys, from the desert to alpine meadows and from sea level to timberline in a multitude of vegetation and soil types. To cope with hotter, drier soils, gophers simply burrow deeper. They keep active throughout the winter, rather than hibernating, by burrowing through snow and stuffing the tunnels with soil as soon as normal digging is possible. These filled shafts appear as long, crisscrossing earthen cores after the snow melts.

Their practically universal distribution throughout western North America makes gophers our number one pest rodents — (animated weeds, so to speak), especially in agricultural areas. Yet they are not prolific breeders by rodent standards. Populations seem to be maintained with an average litter of four, which is half that of other rodent types. Moreover, females don't necessarily breed every year. And there are reasons for this unusual reproductive behavior. First, the young are reasonably safe from predation deep in the grass-lined nest chamber. Also, the solitary habits of adult gophers prevent the spread of contagious diseases and their own finicky sanitation (they use a toilet chamber and seal it off when it is full) keep burrow systems hygienic. Furthermore, the breeding season seems to be unusually long, probably to take advantage of favorable soil and food conditions to build up population.

What impact Gopher Tabs and Formula S will have on this pattern remains to be seen. Faced with a new environmental pressure, animals must either develop an effective survival mechanism or perish. The pocket gopher may ultimately fight back by having larger litters several times a year. Gardeners, beware! Victory is not necessarily yours, yet. 

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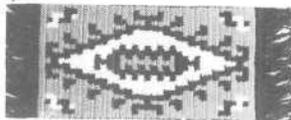
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Address all entries to Photo Editor,
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CHUCK WAGON COOKIN'

Gifts For Those Who Have Everything

by Stella Hughes

SEPTEMBER OR at the latest, October, is an ideal time to start thinking ahead about gifts of food for the holidays but actually, giving out homemade food is part of our American heritage at any time of the year. Wonderful gifts from your kitchen can go far beyond the usual fruit cakes, candy and cookies for Christmas. Food for birthdays, Mother's and Father's Days, treats for Halloween, Valentine remembrances, Easter, or as a gift to an elderly friend (or even a stranger) in a nearby nursing home is always appreciated.

In some farm and ranching communities when there's a death in the family, neighbors get together and prepare a whole meal and deliver it hot and steaming the day of the funeral, an act of thoughtfulness that is forever appreciated by the bereaved family.

I doubt if there's a woman that doesn't have some special cooking skill different from that of her friends. Some years ago our ranching community planned a special treat for a woman returning from an extended stay at a distant hospital. We knew there would be scores of relatives and old friends calling at her home the Sunday following her return, so each neighbor listed the kind and amount of her food gift and a sumptuous meal was planned.

One young bride swore, almost tearfully, that she had no cooking skills and just could not contribute to the dinner. I asked her what was the one food item she prepared most often at home that was relished by her husband. She said "flour tortillas." I said that was perfect as no one else in our group liked to make tortillas. And on the day of the dinner, the large stack of fresh tortillas made by the young bride was a great hit with the men who used them as a scooper for the chili con carne made by another neighbor.

One woman I know makes the best darned pickle relish you ever tasted, and she's expected to bring a jar to every potluck dinner or picnic. Half the people there would be disappointed if she didn't. She simply calls it "End of the Garden Pickle Relish."

Last year my husband and I returned from a long trip and found half a juicy cherry pie on the kitchen counter, along

with a pan of enchiladas that only needed to be heated. I was exhausted and as my husband and I enjoyed our meal on the patio, my good feelings for our neighbor were almost as good as the food itself.

One of my earliest memories is a bowl of cold, spicy, homemade applesauce and some graham crackers brought by an elderly woman when I was recuperating from the chicken pox. Simple fare, but I remember this woman's thoughtfulness even after fifty years!

For a number of years I made up large batches of venison mincemeat after hunting season. I canned most of it in quart jars and gave it out for Christmas presents. I had mimeographed little packets of mincemeat recipes which I taped to the jar along with a sprig of holly or mistletoe. The favorite recipe was for mincemeat cookies, and a number of my daughter's pre-teen friends later told me the mincemeat cookies were the first they ever made, and they never forgot the compliments they received from their families.

Back in the early 1940s Billie Mills was the musical director for the popular radio show "Fibber McGee and Molly." His corn relish became famous when he made up a batch and a friend persuaded him to enter it in the Los Angeles County Fair at Pomona. The relish won first prize and because of Billy's connection with the show, people everywhere started making Billy's relish. Later, he made up batches which he sent to friends for Christmas. It was an ideal gift for those who "had everything" and could be given nothing they already didn't have.

BILLY MILLS' CORN RELISH

5 or 6 ears fresh, green corn (about 1 quart when cut from cobs)

3 cups ripe tomatoes, without seeds

1 1/2 cups chopped green peppers (about 3 peppers)

3/4 cup chopped, unpeeled green cucumber

1 cup chopped onion

Pickling solution:

1 cup sugar

1 pint vinegar

1 tablespoon salt

1 teaspoon celery seed

1 teaspoon mustard seed

Wash and drain vegetables. Cut corn from cob. Scrape cobs to get all of the milk from kernels. Combine with all of the other prepared vegetables in a large pot or preserving kettle. Mix the pickling solution separately; pour over the vegetables; simmer for 1 hour and place in jars. Seal while hot to preserve flavor. Makes about 6 pints.

Simple things can mean as much as elaborately prepared dishes that take up hours of your precious time. One woman who makes great homemade coleslaw dressing likes to give a big head of cabbage from her garden along with a jar of her dressing. So maybe you don't have a garden. How about a big jar of homemade ready-mix?

BROWNIE MIX

4 cups sifted flour
8 cups sugar
2 1/2 cups baking cocoa
4 tsp. baking powder
4 tsp. salt
2 cups shortening

Sift together flour, sugar, cocoa, baking powder and salt into a large bowl. Cut in shortening with pastry blender or two knives until well blended. Store in covered container in cool place or in refrigerator. Makes 16 cups.

Directions to pack with mix: Store Brownie Mix in cool place or refrigerator up to 3 months. Use mix to make fudge sauce, short-cut brownies and quick brownie cake.

SHORT-CUT BROWNIES

2 cups Brownie Mix
2 eggs beaten
1 tsp. vanilla
1/2 cup chopped walnuts

Combine Brownie Mix, eggs and vanilla in bowl; blend mixture in greased 8-inch square baking pan. Bake in 350 degree oven 20 to 25 minutes or until a slight imprint remains when lightly touched with finger. Cool in pan on rack. Cut in 2-inch squares. Makes 16.

QUICK BROWNIE CAKE

2 cups Brownie Mix
3 tblsp. milk
3 eggs, separated
1 tsp. vanilla
Ice Cream

Combine Brownie Mix, milk, egg yolks and vanilla in bowl. Stir until blended. Beat egg whites in bowl until stiff peaks form, using electric beater at high speed. Fold into batter. Spread batter in greased and waxed paper-lined, 8-inch square baking pan. Bake in 350 degree oven 35 minutes or until done. Cool in pan on rack 10 minutes. Remove from pan; cool on rack. Cut in squares and top with ice cream. Makes 9 servings. 

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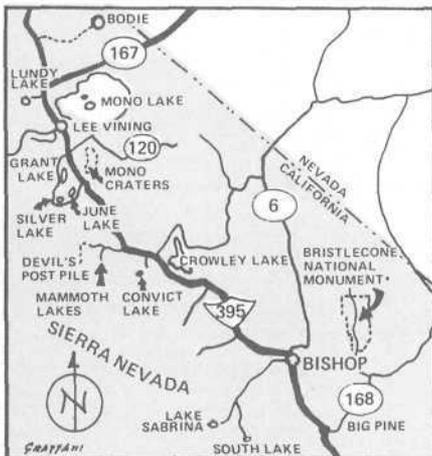
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Autumn Color in the Owens Valley

About the second week in October is the time for those enamored of foliage tours to start looking for color in the Owens Valley of California. Stark landscapes contrast magnificently with the autumn colors of aspen and cottonwoods. This unique backdrop is what makes the area around Bishop and Lone Pine so spectacular in the fall.

A Photo-Essay by Pete Haynes



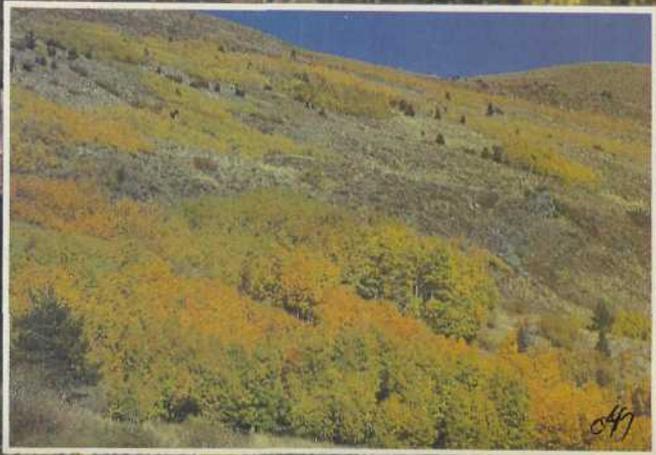
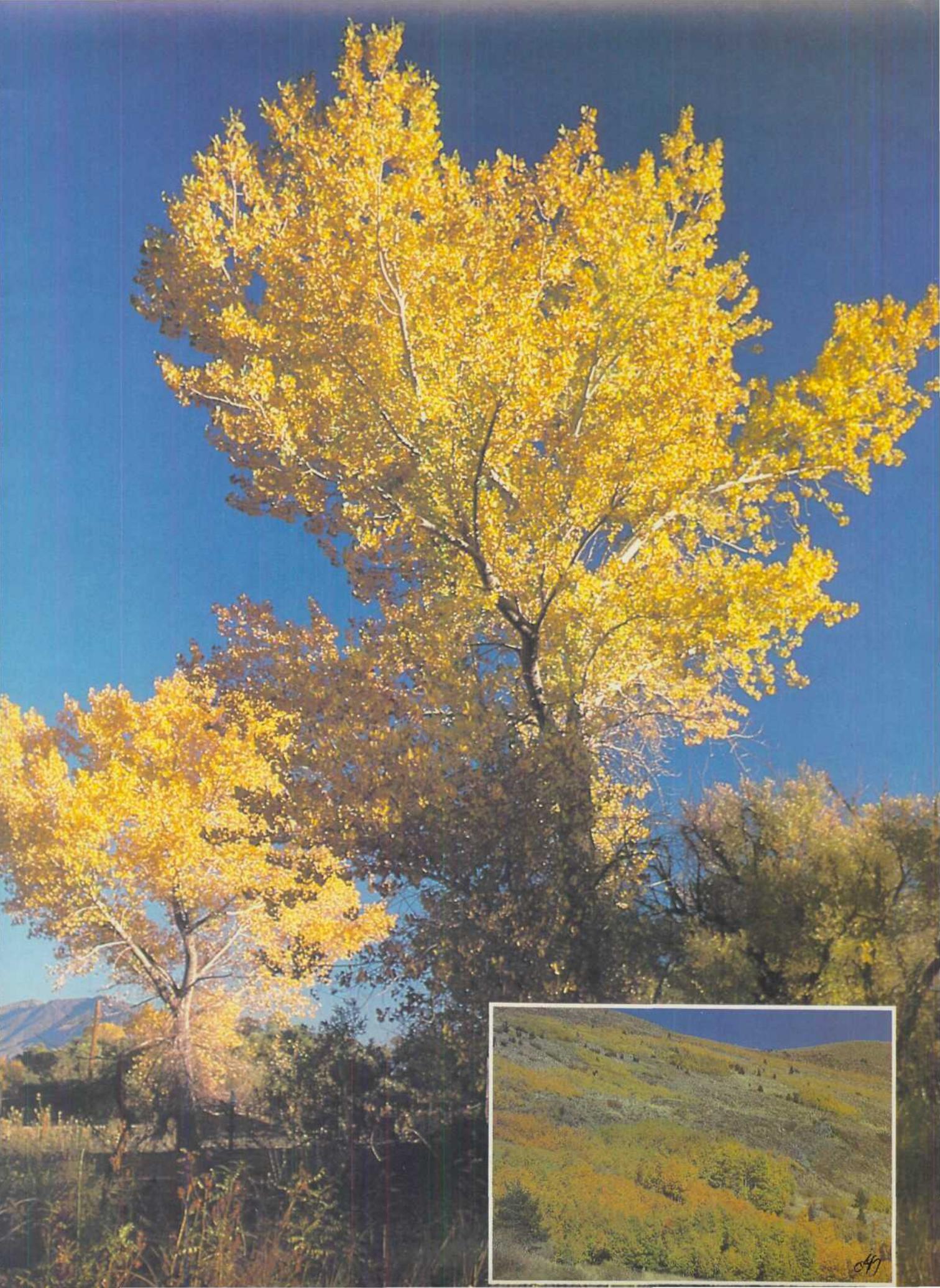
(Opposite page) The outskirts of Bishop abound with aspen and cottonwood, along with old barns and livestock. However, leaves on the hot, dry south slopes (insert) are slower to change color.

A steep eastern slope of the Sierra Nevadas marks the western limit of the Valley. Mt. Whitney, of course, is the highest peak to be seen, reaching up to over 14,000 feet. To the east, the Valley is bordered by the White Mountains which are terraced with many groves of aspen, following the stream courses down their slopes. At the 11,000-foot level in these mountains, and easily accessible by road, are the bristlecone pines which vie with the creosote bush in being the oldest living things on earth.

Many lakes and streams are to be found throughout the Valley. At their different altitudes, these host a wide range of autumn colored aspen on any given day. For example, if you're making a trip next year and it turns out to be a little late for lake aspen (at around 10,000 feet), at lower elevations, say on lower Rock Creek, you will probably find aspen with leaves still on them. And the cottonwoods around Bishop will surely have their large canopies of orange pressed against blue skies.

Old wagons, buildings and mines spot the floor of the Valley, offering many splendid settings for the photographer. Most of these spots are easily accessible, as there are many miles of paved roads leading up into the mountains, some running alongside the lakes and streams. As can be seen on our map, the side roads run off or are near U.S. Highway 395, which runs north and south through the valley.

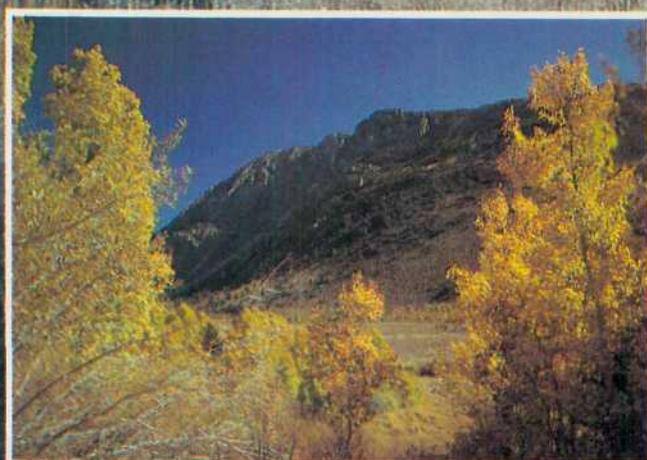
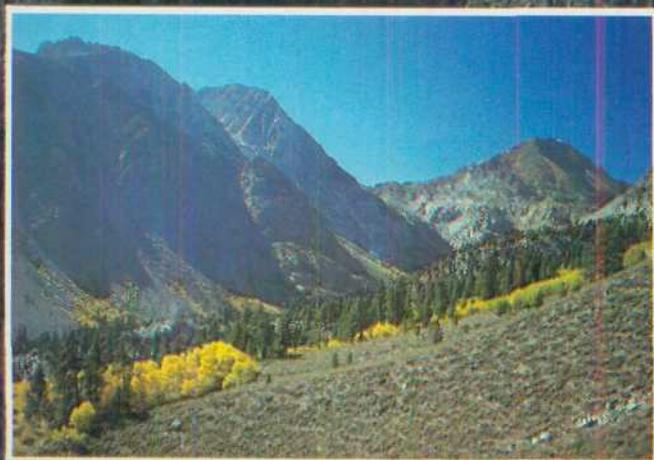
Hopefully, you'll be fortunate as I was and witness herds of elk grazing alongside your route and packs of deer bounding through the meadows near the June Lake loop. But remember, timing is all-important. There is one week every October that will offer both high elevation color in aspen at the same time the cottonwood is ablaze at the lower levels.

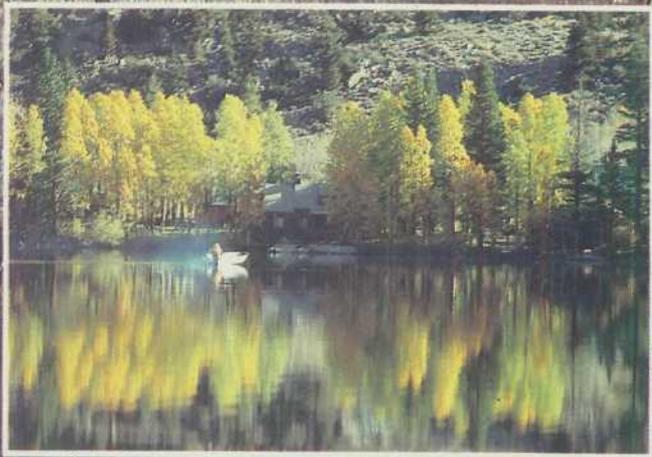


Owens Valley

Outcropping of cottonwood (large picture) is an indication of surfacing ground waters. Photograph was taken facing the east slope of the Sierra Nevadas. Tioga Pass (insert, left) is the only way over the southern Sierra Nevadas. Parallel to the pass is a

nice two-lane road running through Lee Vining Canyon. Looking north along the June Lake Loop (insert, center) one can see Grant Lake. Also along this Loop are Silver (insert, opposite page) and June Lakes, both good for early morning fishing expeditions.





Owens Valley

Side canyons off State Highway 168 near Bishop host small lines of aspen showing striking color contrasts. Aspen on the June Lake Loop across Grant Lake (insert) have different, more flame-like colors.





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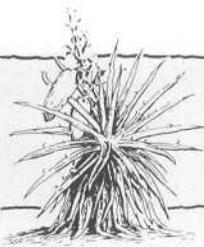
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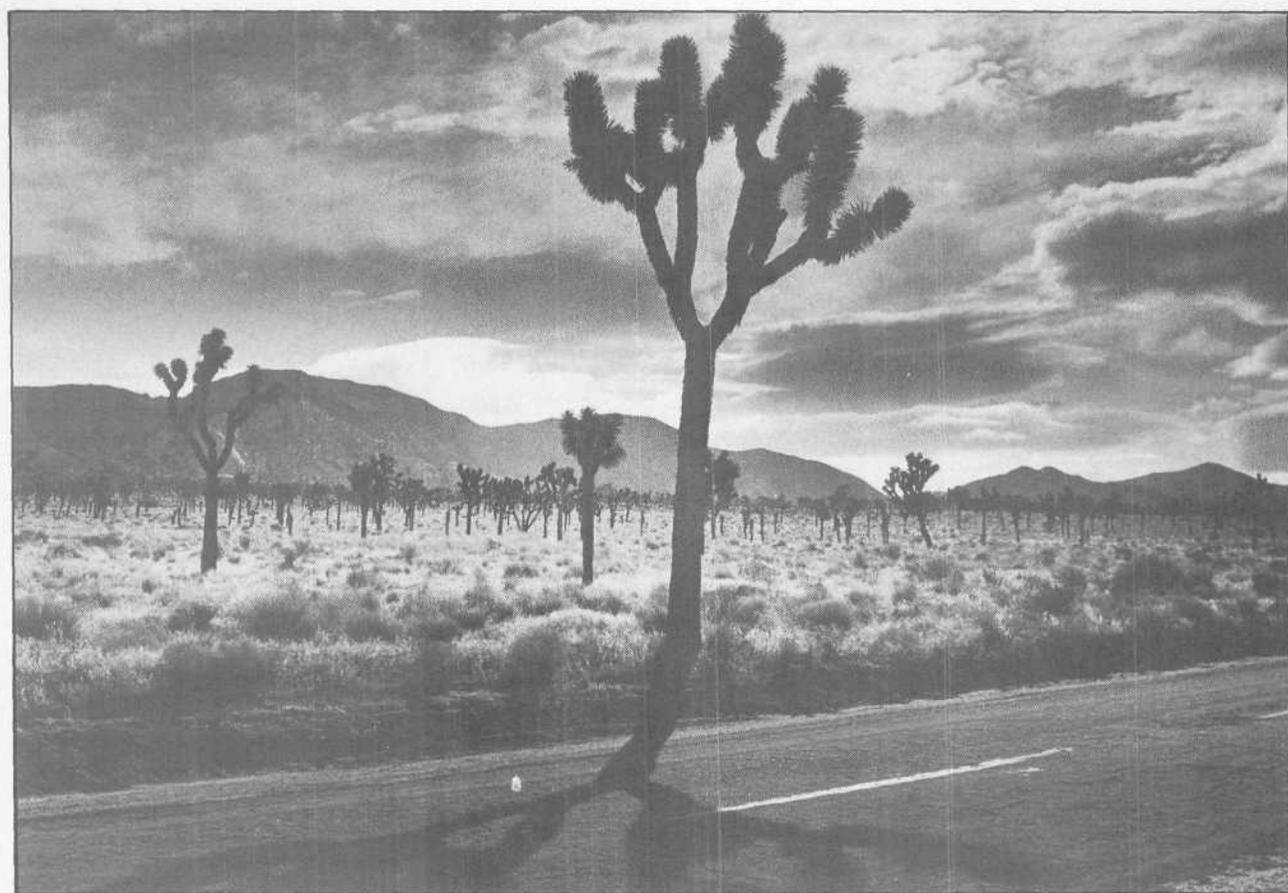
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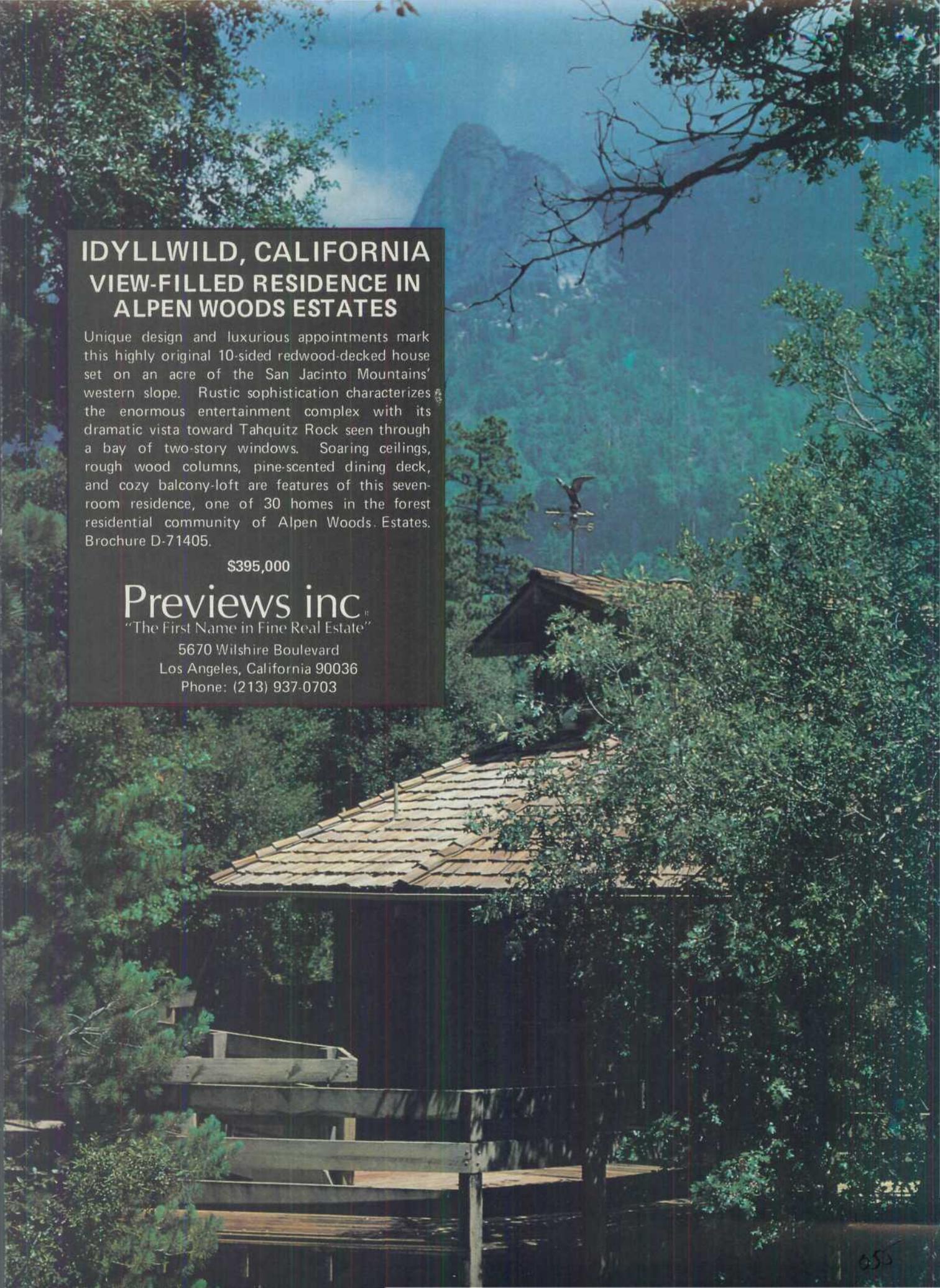


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