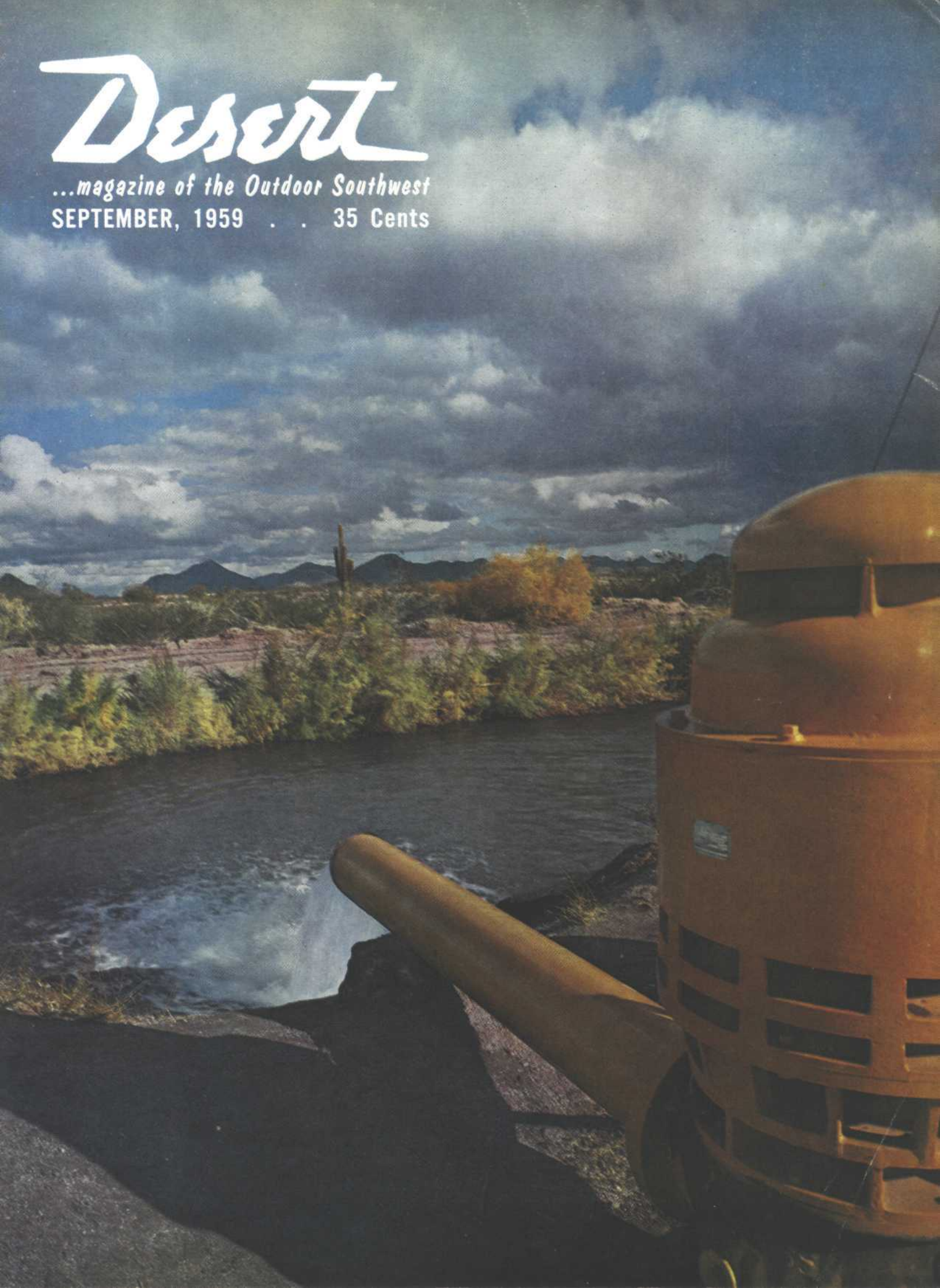
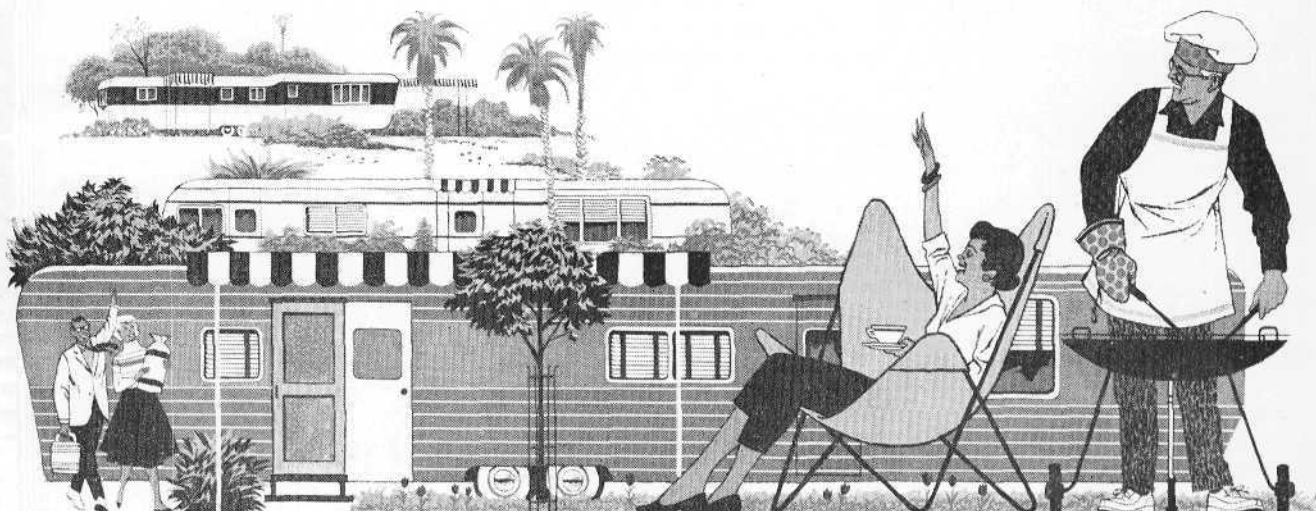


Desert

...magazine of the Outdoor Southwest
SEPTEMBER, 1959 . . . 35 Cents





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Desert

...magazine of the Outdoor Southwest

Volume 22

SEPTEMBER, 1959

Number 9

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ABOUT THE COVER . . .

. . . In the Southwest the clouds are a beautiful part of the sweeping scenery, but they yield precious little rain. For that reason man on the desert must look down instead of up for his share of water. Wells are drilled to tremendous depths in some regions, and the water brought to the surface by electrically-powered pumps, a brightly-painted example of which is shown on the front cover. Carlos Elmer of China Lake, Calif., took the cover photo at an irrigation canal north of Gila Bend, Ariz.

Publisher's Notes . . .

A lady from the desert town of Imperial, California, was our first Christmas "buyer" this year. On July 29 she placed an order for two *Desert Magazine* gift subscriptions for December delivery. Not only was she shopping early, she was shopping under decidedly un-Yule-like conditions: the temperature was 111 degrees at Imperial the day she thoughtfully anticipated Christmas.

* * *

Our front cover this month depicts a controversial subject: agricultural use of underground water in desert areas. Large areas of the Southwest are being put to cultivation as deep well turbines, such as the one depicted on our cover, suck irrigating water from storage basins far below the desert's valleys.

Are we creating salad bowls or dust bowls when we tap the water-storage basins? Commercialism on the one hand, conservation on the other. A wise application of both must be the answer.

* * *

Reaction was heavy to the first-time reproduction of an oil painting on *Desert's* front cover (Brownell McGrew's "Song of the Canyon", July Issue). Of every four letters on the subject sent our way, three were in favor of the "occasional" use of an outstanding work of Southwestern art on our covers. A sampling of the cover comments we received can be found in the Reader Response columns, page 25.

* * *

As usual, each fall the staff of the *Desert Magazine* invites its readers to visit the Desert Art Gallery and Book Store when you are in the Palm Desert area. Subscribers are also invited to see the printing plant of the magazine. The gallery and book store are open to the public without charge. Thousands of visitors "drop in" each year. Some of the best southwestern painters decorate the art room walls. The book store features Southwest titles only. Each is the largest of its kind in the United States (yes, including Alaska and Hawaii.)

CHARLES E. SHELTON
Publisher

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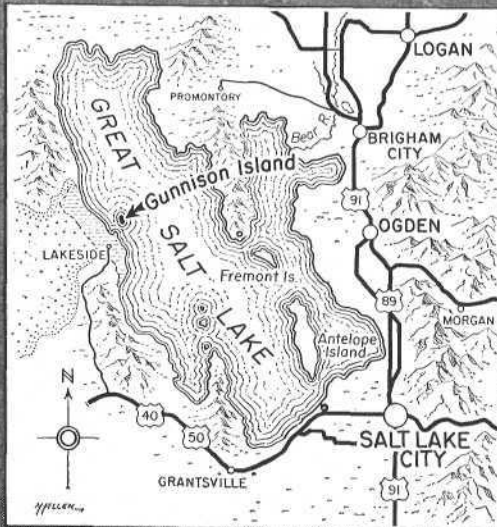


Pelicans in the Desert

By FRANK A. TINKER

*A forbidding island
in the Great Salt Lake
is a haven for the
white pelican . . .*

FLATS IN THE VICINITY OF THE GUNNISON ISLAND PELICAN SANCTUARY. WHEN THE WATER RECEDES BEFORE THE WIND, THESE STRETCHES BECOME A MUDDY TRAP FOR THE UNWARY.



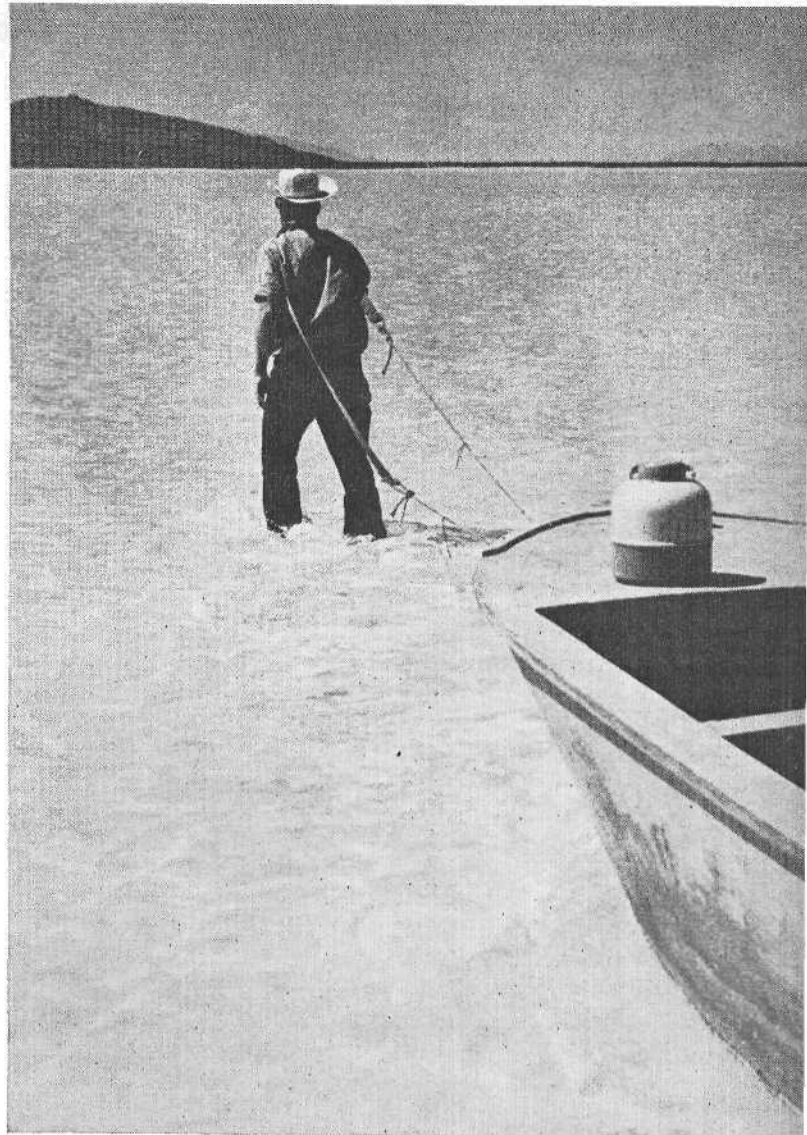
THE VAST temperamental shallows of the Great Salt Lake surround — and effectively isolate — several islands of critical importance to Western birdlife. Some of these rocky eminences, actually submerged mountains, have become peninsulas as the lake level declined during the past 30 years. Two islands, however, are located in deep and remote sections, so that they will probably survive as bonafide islands as long as there is a Great Salt Lake.

Of these two, Fremont Island is now used as a sheep pasturage when the season permits; the other, Gunnison, is completely uninhabited and through this isolation has become one of the largest known rookeries for the wary and magnificent great white pelican. Situated in the almost unapproachable northwest part of the lake, Gunnison's 170 acres afford complete protection from the coyotes, bobcats and other predators which roam the mountainous Utah desert beyond the arm of water separating island from mainland.

As for human disturbances, the island is visited not oftener than every other year or so, and then usually by some curious ornithologist who is willing to put forth the considerable effort required to get there. The white pelicans, unlike their brown sea-faring cousins, completely shun mankind anyway, and this ostracism could not suit them better. Their colonies on Gunnison have thrived since the last guano sifters left a half-century ago, and now the total pelican population numbers in the thousands.

Utah artist-writer Alfred Lambourne lived on this island for 14 months in 1886-87. Out of his lonely experience came the book, *Our Island Sea*, in addition to many paintings.

During May and June large areas of the salt-shingled beaches are spotted with the low mud mounds on which these tremendous birds deposit their two or three eggs. Both in the incubation duties and in feeding the insatiable



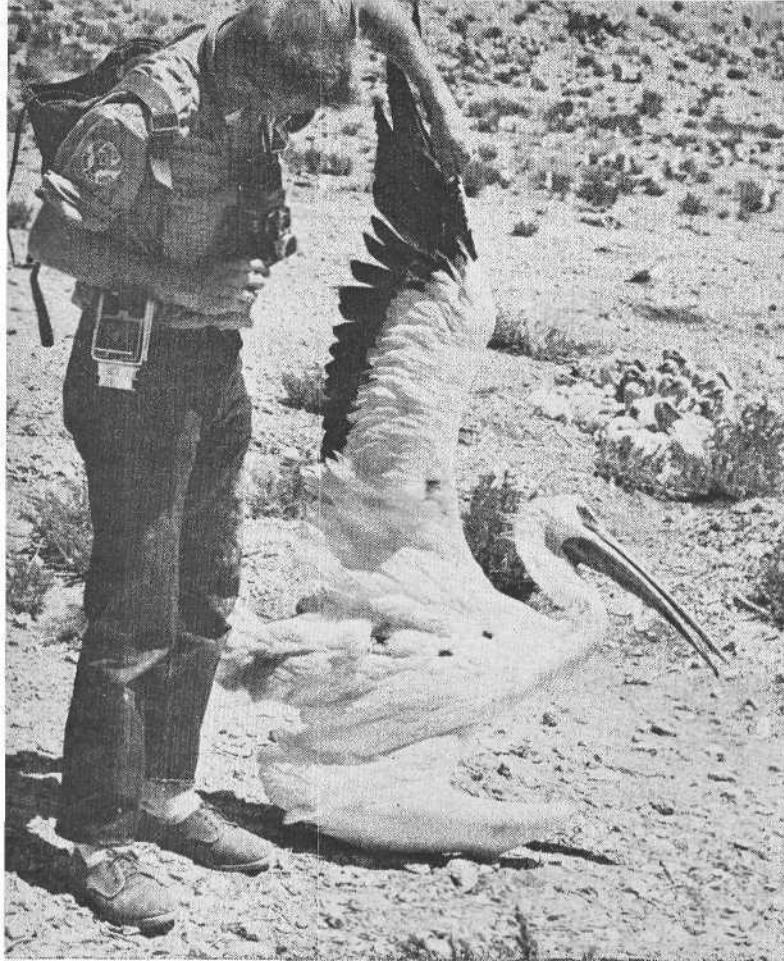
LEFT—ONCE ALOFT THE GREAT WHITE PELICANS ARE THE PICTURE OF GRACE, BUT GETTING INTO THE AIR IS A DISTINCT EFFORT. A CONSIDERABLE TAKE-OFF DISTANCE IS REQUIRED, AND FURIOUS BEATINGS OF THE GREAT WINGS. MANY OF THE YOUNG BIRDS PERISH THROUGH MIS-CALCULATION OF FLIGHT DURING THEIR EARLY TRAINING. THE GUNNISON PELICANS' CHIEF SOURCE OF FOOD — CARP — IS FOUND ON THE OTHER SIDE OF THE LAKE.

ABOVE — GETTING TO GUNNISON IS SOMETHING OF A PROBLEM. ONE IS FACED WITH EITHER A LONG BOAT TRIP FROM THE LAKE'S FEW DEEP-WATER HARBORS, OR—AS THE AUTHOR DID—TOWING A CRAFT SEVERAL MILES THROUGH THE HEAVY BRINE FROM ONE OF THE ISOLATED ROADLESS SHORES IN THE NORTHWEST PART OF THE LAKE. THE BOTTOM HERE IS OF HARD GLARING SALT, AND FOR MANY MILES THE WATER IS NO MORE THAN KNEE-DEEP.

young, the parent pelicans share alike. This feeding, since the only marine life which exists in the brine of the lake —almost one-fifth of the water's volume is comprised of various salts—is a tiny brine shrimp which is unsuitable for young pelican bellies, presents an almost insuperable problem.

The high-flying birds, refusing to nest elsewhere, make a 60-mile trip to the nearest fresh water after fish, and sometimes go much farther. At the Bear River inlet, on the northeast shore of the Great Salt Lake, the huge parents scoop carp by the ton out of the shallows, carrying them in their gullets back across the 2500-foot peaks to Gunnison. These carp—or their partly-digested remains—litter the island's coves, and it probably is a good thing for both pelican and public that the two are so widely separated.

Once home with its treasure, the parent seems to have no trouble distinguishing its own youngsters among the



ABOVE—A FULL GROWN BIRD MAY HAVE A NINE-FOOT WINGSPREAD, ALTHOUGH WEIGHT IS NOT MORE THAN 17 POUNDS. THIS BIRD, WHICH DIED FROM APPARENT ATTACK OF BOTULISM, WAS NOT FULL GROWN.

RIGHT—PARENT PELICANS FORM A WARY RING AROUND YOUNG WHICH CLUSTER IN BANDS AS SOON AS THEY ARE ABLE TO WALK.

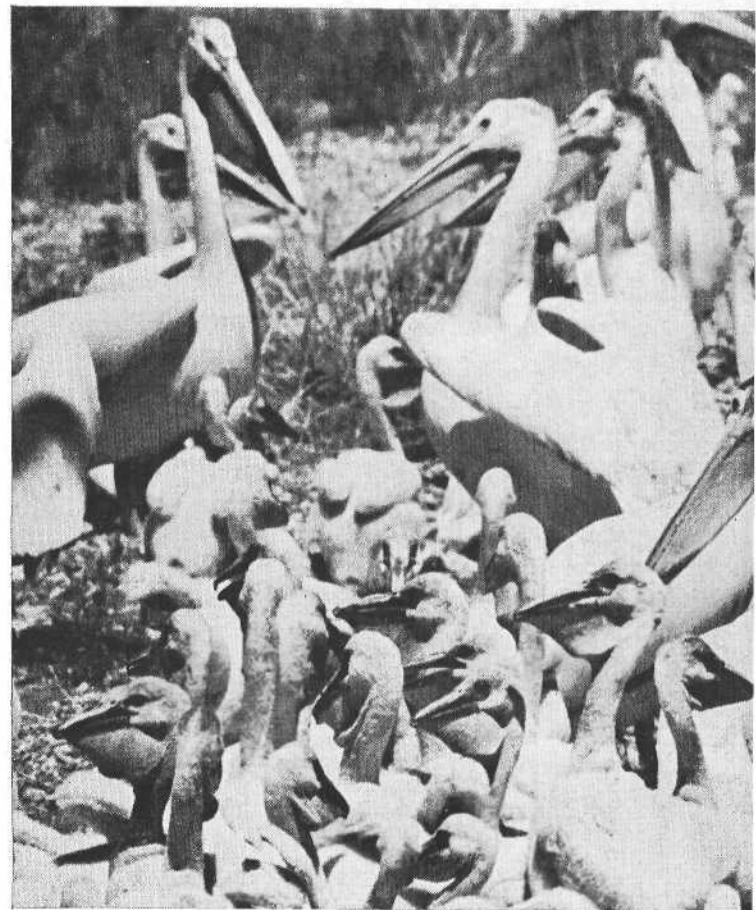
BELOW—THE SLIGHTEST PROTUBERANCE ON GUNNISON SHORELINE IS BUILT INTO ROSETTES OF CRYSTALLINE SALT BY SPLASHING OF THE BRINE WAVES AND SUBSEQUENT EVAPORATION.



gangs of boisterous fledglings which roam the place. Yawping open its great beak, the parent permits the young bird to ram its own already sizable equipment far down into the parent's gullet after the fish.

Dinner—or its patience—at an end, the older bird flings the persistent nestling away, then settles in grumpy dignity to provide shade. Without this shade, both the very young pelicans and the unhatched eggs might perish in the heat of the glaring sun on this barren shoreline. For this reason, thoughtful visitors to the island are careful not to keep the parent birds away from their nests for any appreciable length of time.

Few boats sail the great inland sea and its heavy storm-prone waters these days. Since getting to Gunnison Island involves a considerable voyage or dragging a boat over miles of hard sand and salt shallows, the recommended place for seeing the great white pelican is the refuge at Bear River, 15 miles west of Brigham City. For a glimpse of their rocky remote hideaway, and an appreciation of the effort these birds must make to survive, you can drive



to the almost deserted construction camp and harbor at Little Valley on the extremity of Promontory Point. Far across the glistening brine to the west, usually floating in a mirage, is the humped figure of Gunnison and its off-shore stepchild, Cub Island.

For those willing to risk their boat in the brine—which is more of a nuisance than a danger—launch either at Little Valley, at the harbor at Saltair on the south shore, or at Lakeside camp on the far terminus of the tremendous rock fill which has been stretched across the lake. The fact that this strange refuge is invaded so infrequently attests to the strength of its natural defenses. Although it is definitely only for the hardy and the adventurous, it is nice to know that the island exists, and proof of this lies in the continuing flocks of great white pelicans that make their biennial pilgrimages along our Western reaches.—END

For a color photo of Gunnison Island pelicans in flight, see back cover . . .

THE BROKEN BURIAL JAR

The Indians were reluctant to tamper with the will of the gods, but the white man artist knew superstition when he heard it. Later events gave him pause to wonder.

By HAZEL I. ANNIS

7 HE LATE Bert Phillips, Taos, New Mexico, artist, pointed to an ancient burial jar occupying a prominent place in his studio.

"Are you superstitious?" he asked.

"I don't know," I answered, my attention drawn to the earthen jar. It was unmistakably a rare specimen.

"Well, if you are, there's quite a tale here," he said.

The following is that story as related to me by Phillips:

I had been painting all morning in my studio, and decided to go for a walk in the village. Just as I started through the gate I met Geronimo, an Indian from the Pueblo who occasionally posed for me. Without a greeting he said, "I was out on Lobo, looking off to mountains at left. Where canyon branches out I saw this jar half showing in the arroyo wash. Very old it was."

"Did you get it?" I asked.

"Yes, I get it."

"What kind of pottery is it?" I wanted to know.

"Round. Had pintos on it. Very old, years it has been there."

"Was it broken or chipped?" I asked.

"No. It all one piece, all good," Geronimo answered.

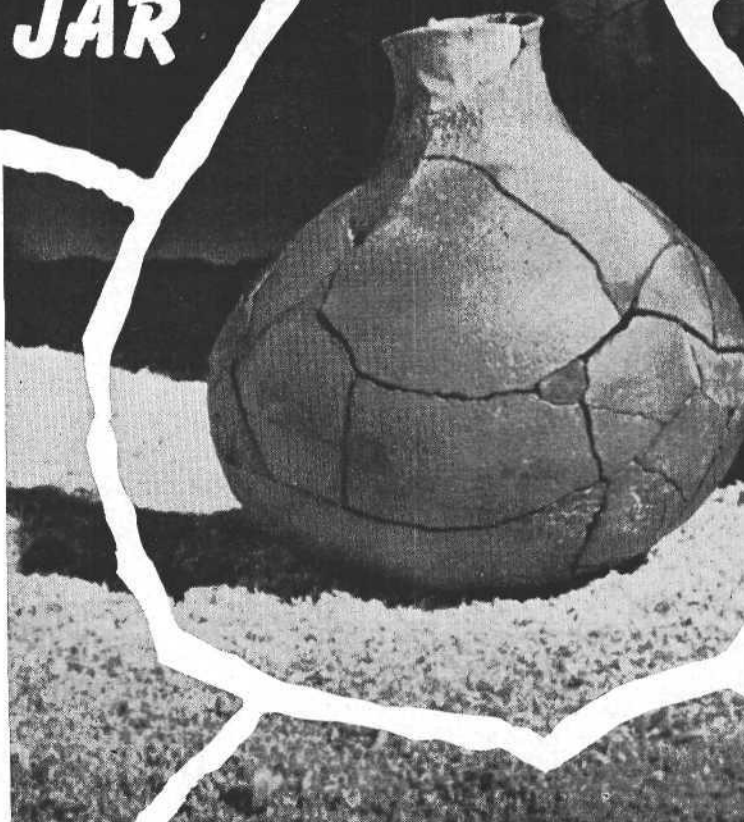
I wanted the jar—felt I must have it. It was probably hundreds of years old, and if all in one piece would be a very valuable addition to my collection.

"Want to sell it?" I asked, trying to sound casual.

"Yes," was his answer.

"When will you bring it to me?"

"Tomorrow."



Early the next morning I was outdoors waiting for Geronimo. I could not bring myself to start painting. I had to see the jar. I don't know how long I stood there before the Indian arrived. He did not have the jar with him! My disappointment was great.

"Why didn't you bring the jar like you promised?" I asked crossly.

"I forget. I bring it tomorrow," he answered in a tone that did not unmask what was going on in his mind.

For five days this went on. Every morning I waited beside the gate. Geronimo would arrive—without the jar—but with a new excuse. I realized he had no intention of bringing the jar to me. But, why? What reason could he have? Why had he so readily agreed at first to sell it?

Geronimo's wife came to our house a couple of days each week to work, and I thought my wife would have better luck trying to get her to bring in the jar. The Indian woman agreed to our wishes, and said she would bring the jar the next day. But, she came empty-handed. The next day

she renewed her promise; the day following she had a new excuse.

I called on a fellow artist for advice. Charles Meiner, an amateur archeologist, knows much about Indian history and religion. When I told him my troubles, he laughed.

"I know all about that piece of pottery," he said. "I, too, have been after Geronimo to bring it to me—but, he won't—he never will. It must be at least 1000 years old—undoubtedly a burial jar. At the time it was buried with the deceased tribesman, it was filled with food for use on his journey to the happy hunting grounds."

"Geronimo doesn't want it, and would be glad to be rid of it, but he's afraid to attempt carrying it in to anyone. Something to do with a superstition the Indians have that nobody can bring in such a jar whole."

"Rubbish," I answered. "I don't care what superstitions the Indians have. I want that jar, and I'll go out there and bring it in myself."

"You can try," answered my friend. Soon, all the artists in our colony

knew I was going to Geronimo's home for the jar. They were curious to see what success I would have.

My son Michael, then 12, went with me to the pueblo. Only Geronimo's wife was at home, and I asked if I could see the jar. She brought it to me—it was very old and very thin and had not a chip or crack in it. The jar was indeed rare and beautiful. If there had ever been any doubt in my mind, it vanished: I had to have that jar.

I decided to start the bargaining at \$10. She undoubtedly would ask \$25.

"You want to sell it?" I asked.

"Yes," she answered. "We want 50c."

I gasped! Charles had been right: they wanted to be rid of it.

Clinging to my treasure, I carefully climbed down the pueblo ladder, and got into my car.

"You drive, Michael," I ordered. "I'm going to hold onto this jar. Now that it's mine, I want to keep it in my sight until we reach home."

"Couldn't we stop by the pond?" asked my son. "It's very warm, and I was going swimming when you asked me to go to the pueblo with you."

Reluctantly, I agreed. "Make it a short swim," I said.

Michael parked near the pond and scrambled out of the car. "Leave the jar in the back seat and come down and watch me swim," he yelled.

"Leave the jar? Not on your life! I'm taking it with me," I answered as I followed him down the bank.

Michael peeled off his clothes and threw them on the grassy bank. I searched for a safe place, and gently put my jar down. Then I studied the sky—it had a peculiar yellowish cast. My current project was a painting of an Indian on a white horse, and I was sorry I had not seen this yellow sky before starting the painting.

Just then my attention was directed to a burro coming down the trail. Knowing that burros never get enough salt, I was afraid this one would rush my jar, thinking it was a salt vessel. Quickly, I picked up the treasure and hid it under Michael's clothing. Then I returned to contemplating the yellow sky. It was the first time my thoughts had strayed from the jar since I first held it in my hands.

Suddenly, I heard an ominous "clack." Michael was rolling on his clothes, drying himself off!

I raved! I tore my hair! I said all manner of things I had never said before.

Poor Michael was so frightened he was trembling.

I struggled to regain some calm. "I'm not mad at you Michael," I said, "but I have never been so angry at anyone in my life as I am right now with myself."

Under the boy's clothing lay my jar—in pieces. I sat down on the grass and fitted them together. They were all there except one small diamond-shaped piece. We combed the grass with our fingers, but could not find it.

As soon as we reached home, I glued the pieces together. I worried about the missing piece until I remembered that a hole was often left in food burial jars to let out the evil spirits.

Next day Geronimo came to see me. The first words he spoke were: "You did not bring it in?" He could tell from my face that something had gone wrong.

"No," I answered. "I had an accident."

He gave me a dour look, and then turned away. What thoughts were in his mind I could not even begin to imagine.—END

Photo Hints

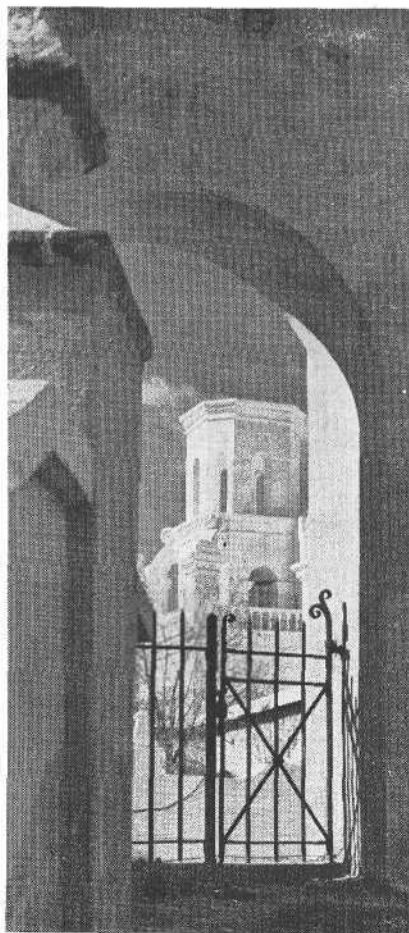
THE SOUTHWEST is dotted with old Spanish Missions—monuments to a bygone era—offering pictures of unusual interest and beauty.

Many of these architectural masterpieces have a white, lime-plaster outside finish, so you must be careful to expose correctly, for white reflects sunlight. Use the light meter to get correct reading from lightest area. If you don't have a meter, decrease your lens opening (exposure) $\frac{1}{2}$ to 1 stop. A white building against a blue sky is the same as white clouds against the blue sky—you must use a yellow filter for black and white film to darken the sky and emphasize the white mission. Early morning or late afternoon sunlight is best for good shadow details.

It's important to know what kind of picture you are after: a salon type; a documentary shot with the wife and kids to send the folks back home; or a photo of Indians with a church as background.

For the salon photo, search for unusual angles. Shoot through an old arch, an iron gate, or frame the subject with a tree (see accompanying photo).

Spanish Missions



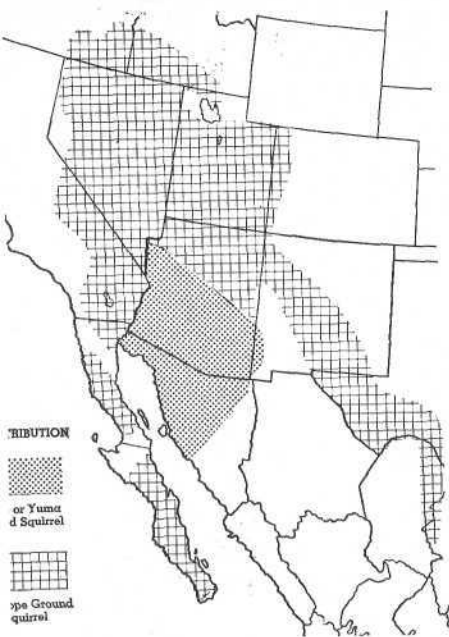
by Bob Riddell

Don't copy a shot you have seen. Be original. Never photograph a building from a "head-on" view. Move to one side to get a three-dimensional shot of the subject. Perhaps there is a hilltop nearby from which you can take a picture.

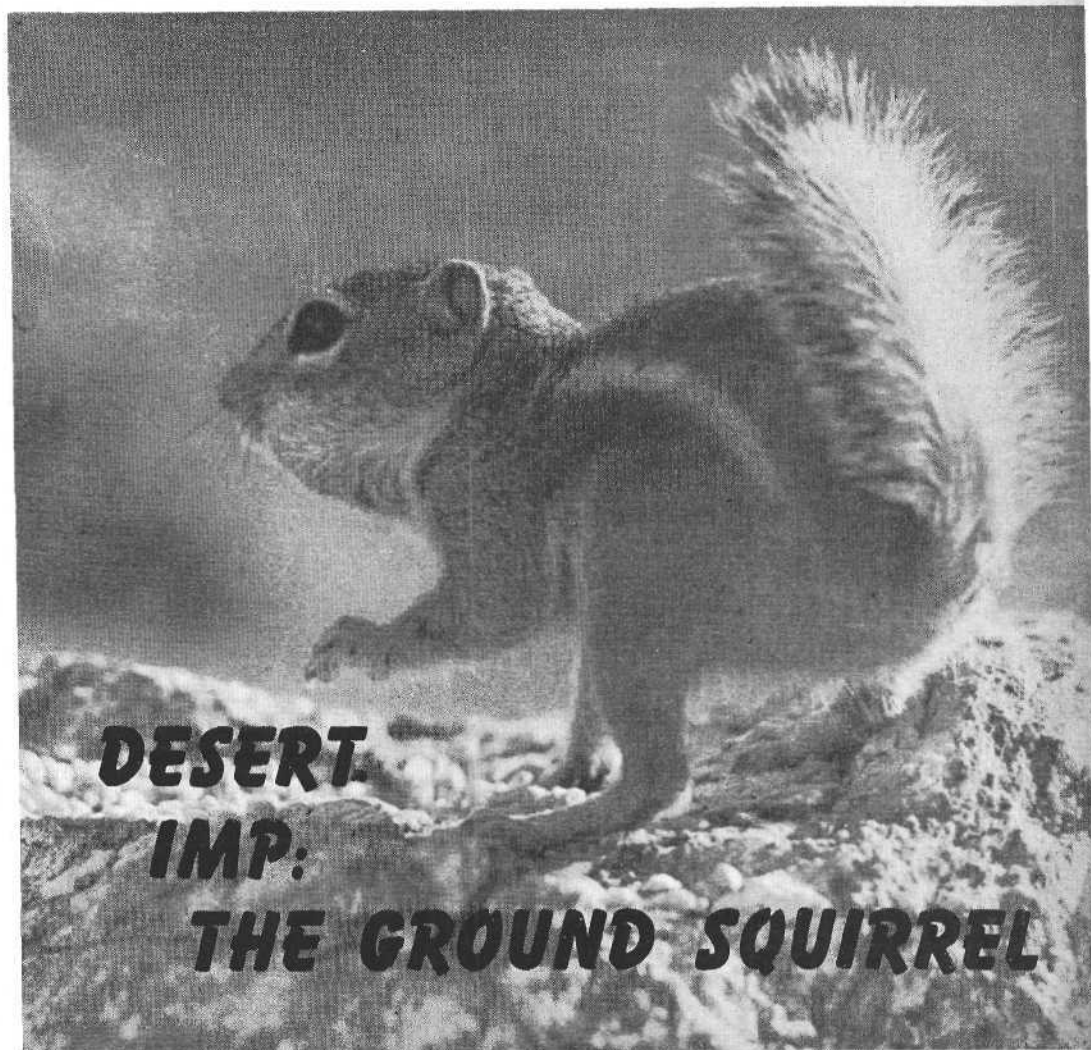
When using people in your picture with a full view of a mission, don't put them too close to the building as they will look small as ants. Move them up to the camera to the immediate foreground, with the mission in the background. Have them doing something—looking at a map, getting out of a car, snapping a picture of the church—to take away that "static-look pose."

Old missions usually have ornate interiors worthy of capturing on film. Always get permission from those in charge—the padres or nuns. They will cooperate with you. Lighting is often dim and requires time exposures. Take several shots of the same subjects to increase your chances of success.

Illustrating this article is a salon-type photograph of historic San Xavier Mission 10 miles south of Tucson. The Papago Indians call San Xavier the "White Dove of the Desert." This photograph was taken at the rear of the church through an arch at the back courtyard. Camera data: Rollei-cord, Tri X film, yellow filter, 1/60th sec. at f. 18.



By EDMUND C. JAEGER, D.Sc.
Curator of Plants
Riverside Municipal Museum



DESERT IMP: THE GROUND SQUIRREL

ANTELOPE GROUND SQUIRREL is the name of the small chipmunk-like creature you saw so quickly dashing into the brush as you motored along the sunlit highway. His real trademark is found in the tail which he carries curved up over his back—a tail that shows on its underside a broad white stripe, particularly noticeable when the animal is in motion. And this is the only ground squirrel on the desert-floor that has stripes on its sides.

Scientists have long called this creature "Ammo," a nickname contraction of the scientific name, *Ammospermophilus*, a Greek-derived word meaning "lover of seeds and sand." The attention-compelling white on the tail prompted the specific name *leucurus*, a compound Latin word meaning "white tail."

Not a Chipmunk

Don't be alarmed if at first you thought this small ground squirrel was a true chipmunk, related to the lively forest species. Even Dr. C. Hart Merriam, competent student of mammals that he was, first described Ammo as a chipmunk; only later did he discover sufficient differences to brigade it with the ground squirrels.

This active and amiable little ground squirrel is a dweller of rocky brush areas of the desert. Ammo is a good neighbor and everyone I've ever known who has been acquainted with it has used enthusiastic and endearing words to describe the various activities of this sportive

and friendly rodent. Put out table scraps for him and he is immediately your friend. This food he eagerly eats or carries away in his capacious cheek pouches to his secret store houses beneath rocks, or intricately branching burrows under bushes, perhaps 200 yards away.

Desert Dwellers

Antelope squirrels are true sons of the desert, lovers of both sun and heat. On cloudy or cold days they are quite prone to stay "put" in their underground tunnels, but let the day be sunny and they are out early. Except for a brief period during the hottest part of torrid days, they may be seen scouting for food, or just bobbing about or basking in the sun. In hottest summer they go far enough underground to get relief from the heat. They do not hibernate as do many of the larger ground squirrels; neither do they go into estivation (brief state of summer torpor).

Especially during warm spring days I hear at 8 or 9 in the morning the long, very distinct series of high-pitched bird-like quavering call notes which, beginning and continuing with vigor, suddenly decrease in volume, the last few notes sounding as if the performer were suddenly getting out of breath but persisting to stay on until the very last vestige of air is expended. The volume of these call notes seems out of all proportion to the small creature that makes them. Many newcomers to the desert mistake them for bird calls. These forceful trill-like notes may be repeated at intervals throughout an entire day, especially

by the vigorous males with whom these "songs" may be notes of defiance or warning meant to drive rivals from "staked-out territories."

A right royal dinner guest I had a few months ago. She arrived without invitation; came bouncing into camp just as I was starting lunch. It was a little lady *Ammospermophilus*, and I think she was as surprised to be in my presence as I was in hers. She came down out of the rocks and agilely climbed into a rue bush, sat upright on a branch and with her hand-like paws began to harvest the pungent hot-tasting fruits. Some she ate on the spot, others she tucked away in her roomy cheek pouches.

I got out some raisins and one by one threw them down before her. As each landed, she picked it up. She ate the first one or two, then decided the rest should be stored against a day of greater need. She was crafty, and every time she left me she went off in a different direction—evidently feeling that her ruse would keep me from learning the whereabouts of her many secret cupboards. She soon lost interest in raisins, and resumed her harvesting of seeds.

Two weeks later I returned to this same place. Mrs. Ammo spied me, remembered her benefactor, and came up to me. But, this time she was not alone. Since my last visit she had given birth to five small fuzzy-haired youngsters. They were no larger than walnuts. I passed out raisins again. The young were yet too small to take interest, but spent their time before me in playful banterings. It made a picture I shall never forget.

Family of Five

Five is about the average size for an Ammo family, but eight or nine young are not too uncommon. It is Nature's way of providing against the many vicissitudes that befall small creatures, both old and young. Only recently I saw an antelope squirrel almost fall prey to a red-tail hawk. The squirrel was diligently feeding on grass seeds which it was securing by felling the long seed-heavy panicles by biting off the stalks at the base. While Ammo was engrossed in this activity, the big hawk suddenly appeared above it. In the moment of hovering before the strike, the ground squirrel looked up, saw the danger, flicked its tail and made a mad dash for the cover of a burrobush, sputtering a high pitched alarm note as it went. Outwitted, the hawk flew off.

At another time I witnessed a different sort of near tragedy. This time the aggressive enemy was a desert gopher snake. It was about 8:30 of a sunny morning; the ground squirrels were already out of their burrows and beginning to reconnoiter for food. When I first saw the snake it was lying stretched in the half shade of a catsclaw bush. An antelope squirrel was sitting in an alert position some four feet away. It sensed that something was menacing it, and uttering a high-pitched note of alarm made a dash for a hole. The snake, well aware of what had happened, went down the burrow after the ground squirrel. It is almost always the habit of the Ammos to see to it that the hole they enter is no *cul-de-sac*, but has a second exit; this "back door" saved our rodent's life. The burrow was short, not over four feet long. Hardly had the snake gotten its head well into the hole when the alarmed squirrel popped out of one of the exits and made its get-away.

U-Shaped Habitat

The antelope ground squirrel occupies both Upper and Lower Sonoran zones of a large inverted U-shaped territory stretching from the tip of Baja California, north to Oregon and Idaho and southeastward to El Paso and northern Mexico.

A large quadrilateral area within the embrace of white-tail territory is occupied by another chipmunk-like ground squirrel, the Harris antelope squirrel (*Ammospermophilus*

harrisii), named after an Edward Harris who sent a specimen to Audubon and Bachman while they were working up notes for their treatise, *The North American Quadrupeds*.

Harrisii is much like its white-tailed cousin in appearance, but is gray instead of white on the underside of the tail. Dr. Edgar A. Mearns in *Mammals of the Mexican Boundary of the United States*, wrote of this squirrel: "... there are few of the Sciuridae (squirrels) that can not climb when tempting food is seen dangling overhead, and the golden bunches of ripe mesquite beans are sufficiently tempting to stimulate the present species to arboreal enterprise; and it may be seen awkwardly hugging the spiny branches or sunning itself on the limbs, with tail dropped, frequently uttering its hollow call-note.

Food for Winter

"It lays up ample stores of mesquite seeds in its burrow, which doubtless accounts for its somewhat rare appearance above the ground during the coldest weather. It has sufficient intelligence to husk the seeds from their long pods before carrying them under ground. The capacity of its cheek-pouches is considerable. Those of one that I shot contained 44 mesquite beans . . .

"Its mercurial temperament savors of the spiciness of its food. It is much heavier and stouter than the Gila or Rocky Mountain chipmunks, and is brimful of playfulness and noisy activity, delighting in the fierce power of the summer sun. As one rides over the mesquite flats, it scurries from underfoot, carrying its tail straight up in the air, uttering explosive chipperings as it hurries to nearest mesquite bush, under whose shade it is quite certain of finding numerous holes by which to make its escape; but it oftener stops and chirrups saucily, stamping with its forepaws.

"Its curiosity is so great that a few sharp chirrups with one's lips will often bring it to the entrance of its burrow, or it may run directly up to within a few feet of one. Then it stops, stamps, and jerks its tail, presently beating an equally precipitate retreat and diving into its burrow with a loud note of alarm. Its call note is a quick, hollow whistle; and it also utters metallic chirrups and chipperings suggestive of its impulsive nature. It very commonly sits up perfectly erect upon its hind feet, like the prairie-dog. The perpendicular carriage of its tail when running is characteristic . . .

Snow No Hindrance

"At the higher levels it feeds upon the fruitage and seeds of the Spanish bayonet, which I have found in large heaps under the stones, where it makes its home. There is snow occasionally at this altitude, but these ground squirrels were seen running about more freely than those in the warm valley below.

"One year, when the crop of mesquite mast failed, the Harris ground squirrel migrated from the Verde Valley in large numbers, so that the species was comparatively rare for a whole year.

"This ground squirrel is to some extent carnivorous, as is well known to be the case with the prairie-dog and the large ground squirrel (*Otospermophilus grammurus*)."

The only small mammal you might possibly confuse with the antelope squirrels is the round-tailed ground squirrel (*Citellus tereticaudus*). While somewhat similar in size, it is more slender and lighter (sand) colored and carries a long pencil-sized tail. It is strictly an animal of the open sandy flat deserts. It occasionally may be seen crossing the highway, its near-white body contrasting strongly with the black of the oil-surfaced road. It is out on hot sunny days, but avoids over-exposure to the direct sun by running from the shade of one bush to another.—

END

BUT... DO THEY EVER STOP EATING?

The Rigbys established feeding stations for all the wild animals, but the squirrels made off with the lion's share.

By DOUGLAS and ELIZABETH RIGBY

OUR PURPOSE in setting up a wildlife feeding station at our desert cottage near Tucson was to observe and photograph the local fauna at close range—as many animals and birds as we could attract. But, soon we met an obstacle which often confronts bird feeders: the squirrels wanted all the food we put out.

The villains here were Harris or Yuma Ground squirrels (*Ammospermophilus harrisi harrisi*). Looking much like chipmunks, these small animals measure just a fraction over nine inches (of which three inches is tail), but their internal cheek pockets enable them to make off with a surprising amount of edible swag. They store this food in their underground quarters, and then come right back for more.

We had intended providing for them as well as for the deer, jackrabbits, desert cottontails, and the many birds that frequented the neighborhood; but when the squirrels proved to be incessant raiders of every nook and cranny of the feeding station, it seemed necessary to call a halt to their activities, in certain places at least.

Thus a pie pan in the patio was dedicated to members of the finch tribe, and was kept supplied with sunflower seeds for their pleasure. Before long, however, one ground squirrel discovered this trove of riches and claimed it for his own. Whenever he appeared, which was often, the birds all flew away, and since the expense of flower seeds mounts rapidly when they are consumed in such excessive quantities, and because there are many other things a ground squirrel can eat with equal satisfaction and benefit, we felt that we had to discourage him.

We had been in the habit of setting the seed pan either on the patch of lawn beside our cottage or on top of the patio wall. In either place it was easy enough for the squirrel to reach, for he was adept at scaling the rough stucco wall. The way to circumvent him, we thought, would be to raise the height of the pan by mounting it atop a smooth surface which he would be unable to climb. We started by placing the pan on a single two-pound coffee can; but the squirrel, an agile jumper, found the six-inch leap no barrier at all—the

pan and its delectable contents were still all his.

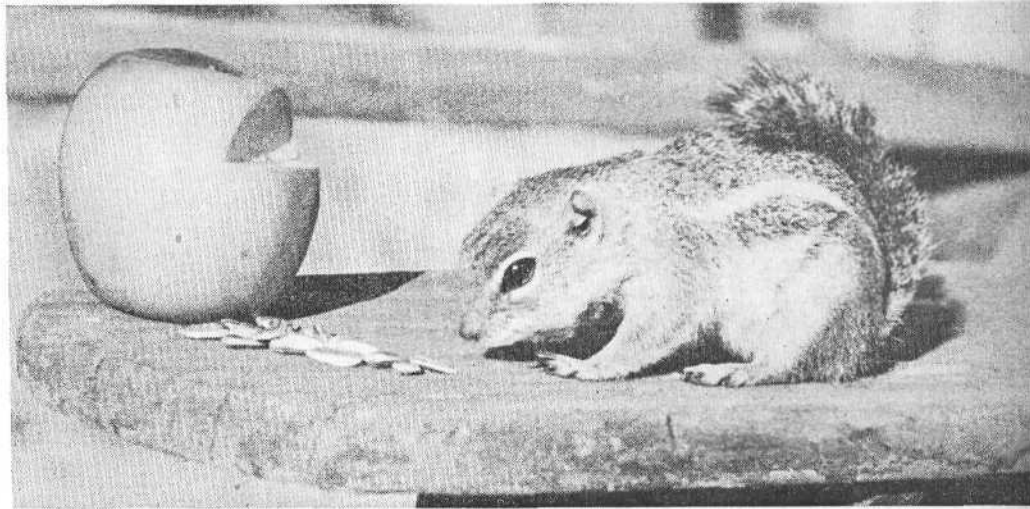
Now began a contest between us and Mr. Squirrel who, like all other creatures in this world, must surely have his limit. Additional cans were added (and as the coffee-can tower grew, each can was weighted with small stones to prevent the structure from blowing over in the desert winds) until the series towered 23 inches over the squirrel's six. Add to this the obstacle of the protruding pan edge, and the ground squirrel went without sunflower seeds.

Yet the squirrels did not go hungry. A special table was set for them in the patio; but their real victory took place in our small back yard which

happily down the brace to feast at leisure in their burrows. In short order they would pillage suet enough to have lasted the wood peckers, flickers and thrashers several days.

In our attempts to foil their raids, we tried a variety of tactics, all unsuccessful before the persistence of the greedy squirrels. We circled the post just below the top with tin cans nailed to the wood at right angles, but this only encouraged the squirrels to perform some extraordinary acrobatics from the adjoining strands of barbed wire. Somersaulting, hanging by one forepaw and reaching for a can lid with the other, they soon mastered the technique of surmounting this barrier.

When they had done this often enough the ramp was clean and scalable once more. In a variation on the tin-can barrier, we tried circling the post with a collar of barbed cholla joints, confident that those piercing spines surely would stop the maraud-



TAKING PITY ON THE BEATEN VAULTER, AUTHORS SET A TABLE FOR MR. SQUIRREL.

was enclosed by a barbed wire fence intended to prevent range cattle from devouring the laundry drying on the clothesline. There were four corner posts with four-inch square tops, and to two of these we regularly placed suet for the meat-eating birds. We nailed the suet slabs to the post tops so no individual would make off with the entire piece, and for the birds this method worked. Not for the squirrels, however.

The farther post was supported by a corner brace set at a 45-degree angle and running from the ground to the post a foot below the top where the suet was fastened. For the squirrels, this brace served as a convenient ramp to the table above. There they would tear off hunks of the suet, then run

ers. We were still too new to the desert to know that ground squirrels regularly mount these wicked plants in spring to dine on the buds and fruit.

We succeeded in protecting the suet post only by cutting a square hole in a broad piece of solid metal and slipping this over the top of the post. It was not, however, our intention to deprive these intelligent and attractive little animals of all the benefits of our feeding station. The second suet post, not three feet from the kitchen window, was therefore left unprotected and open to all comers; there the voracious squirrels found complete and joyous fulfillment.—END



FRANK PINKLEY

Frank Pinkley

This is the 20th anniversary of Frank Pinkley's death. Next time you visit one of the Southwest's great national monuments and the ranger goes out of his way to make your tour "as pleasant, educational and inspirational as possible," thank Pinkley. As a pioneer National Park Service administrator in the Southwest, his influence on the Park Service's "philosophy" continues to be a significant factor.

Once he wrote: "I still think that while we are studying the reactions of bugs and birds and beasts and flowers, it would be good business to put a couple of experts on the study of visitor reactions. After all a visitor ought to grade as high as a bug . . ."

"The Boss"

FRANK PINKLEY'S story begins in 1900 with his arrival in Arizona—a desperately ill 19-year-old youth in search of health. For a brief time he tried farming near Phoenix, then moved to the Gila River Valley. Here, 20 miles north by stage from the town of Casa Grande, towers the Casa Grande ruin—a lonely sentinel in the desert, an enormous mud structure surrounded by the buried remains of what had been a cluster of prehistoric Indian villages.

Because of the archeological uniqueness of Casa Grande, the federal government had taken control of these ruins. Pinkley was hired as custodian.

He pitched his tent a hundred yards from the main ruin, dug a well, and proceeded to get acquainted with his few scattered neighbors. One of them, a Dakota school teacher on the nearby Pima Indian Reservation, had an attractive daughter, Edna Tonsely, to whom the young man soon paid court.

By 1906, the year he married Miss Tonsely, Pinkley had built a frame house in the shade of Casa Grande ruin. The young couple's first years were frugal ones, and they supplemented their income by running the Blackwater Trading Post on the reservation. Pinkley's reputation for sincerity and honest dealings won him election to the state legislature for the 1915-16 term.

"By running an Indian trading post," reminisced Pinkley, "I was able to keep us from starvation the first 15 years or so, and then I got a raise. I got interested and stuck around a few more years to see how long it would be to the second raise. By that time the Park Service had been formed, things began to boom, and I had no time to run sideline businesses, so I got out of the Indian trading profession and we Southwestern National Monuments (then a subsidiary of the

National Park Service) began to . . . go places."

His responsibilities increased. He was assigned to watch over the old Spanish Tumacacori Mission. Next, Montezuma Castle cliff dwelling came under his supervision.

When Pinkley got assistance at Casa Grande he was able to visit the other monuments without leaving "the great house" unattended. "Having two men at Casa Grande," he said, "naturally made that the headquarters of the Southwestern Monuments, and after two or three years it was so designated and I was called Superintendent."

In time, most of the National Monuments now scattered throughout the Southwest came under Pinkley's ad-

could promptly shoot it full of holes. The only way I know to handle the problem is to go where there are a lot of visitors and mix with them, study them and ask plenty of questions."

Pinkley and his field men contributed to the gradual evolution of Park Service philosophy. Once a month the men would write to "The Boss," telling him of the adventures and misadventures of the previous 30 days. These "monthly narratives," still a tradition with the Park Service, were a colorful blending of travel figures, Nature and Indian lore, domestic affairs and local gossip.

In the fall of 1939 Pinkley obtained approval from Washington for his "dream project"—a conference at Casa Grande of all his field men. The meeting was a memorable—and tragic—occasion.

"Standing before all of his men, attired in the uniform that he loved so well, welcoming them all to the gathering which he had planned for so long, thinking of those others who had served him so well but whom the passage of the years had forced to the sidelines was too much for his great heart," wrote one of the men who was at the meeting. "He carried his welcome to its completion, smiled in happiness at the applause of his men, sat down at his table, and slumped forward, his life's work done."

Pinkley's funeral was held on the exact spot where, nearly 40 years earlier, he had pitched his tent in full view of the Casa Grande ruin.

Shortly thereafter Southwest Monuments headquarters was moved from Casa Grande to Santa Fe. Still later the organization was deactivated. The little gate on the path along which Pinkley came whistling to work every morning was chained shut and has never since been opened.—END

By DONALD P. JEWELL

ministration (see accompanying chart). He was obliged to spend much of his time away from headquarters, but Casa Grande remained his first love. Often he took groups of visitors through its excavated village ruins, displaying a keen interest and understanding that rarely failed to instill greater respect for the Indians' way of life.

As the years rolled by, men began to be stationed at the scattered monuments under Pinkley's supervision. Most of these National Park Service rangers lived in tents just as Pinkley had done in his early years. They interpreted for the increasing flow of visitors the strange and wonderful things that were there to see.

"If anyone thinks all the reactions of visitors at our monuments are well known and can be predicted," Pinkley said, "I wish he would write his knowledge down in a book so we

National Monuments in the Desert Southwest



For every one visitor to a Southwest National Monument in Frank Pinkley's day, today there are five. In 1938—the last full year of Superintendent Pinkley's administration—319,000 persons visited the Southwest Monuments. Two decades later—in 1958—these same Monuments were host to 1,627,000 guests. In addition, nine monuments, recently created or not under Pinkley's supervision at the time of his death, welcomed 1,643,000 visitors.

Monument, Mailing address, Outstanding characteristics, facilities	Visitors		Monument, Mailing address, Outstanding characteristics, facilities	Visitors	
	1938	1958		1938	1958
ARCHES—Box 98, Moab, Utah—Giant arches, windows, pinnacles—No facilities; food, lodging available in nearby Moab; check with ranger before hiking, rock climbing.	1,448	40,116	RAINBOW BRIDGE—Tonalea, Ariz.—Greatest known natural bridge—No roads into area; write to superintendent for latest guide information.	222	no record
AZTEC RUINS—Box 457, Aztec, N.M.—Ruins of prehistoric Indian town built of masonry and timber in 12th century; largely excavated and stabilized—Monument open 8 to 5 daily; guided tours in summer; no picnic or overnight facilities.	20,214	44,026	SAGUARO—Rt. 8, Box 350, Tucson—Giant saguaro cactus forest—Picnicgrounds; nine-mile scenic loop road.	20,422	122,709
BANDELIER—Santa Fe—Ruins of prehistoric Indian homes of later Pueblo period—Small campground near headquarters; Frijoles Canyon Lodge (food, lodging, gasoline, supplies) open during summer; saddle horses available.	14,619	83,166	SUNSET CRATER—Tuba Star Rt., Flagstaff—Volcanic cinder cone—No overnight facilities or water; entrance road closed by snow in winter.	6,922	63,187
CANYON DE CHELLY—Box 8, Chinle, Ariz.—Prehistoric Indian ruins built at base of sheer red cliff or in caves in canyon walls; modern Navajo Indian homes and farms—Camping facilities available at Cottonwood Campground near headquarters; limited accommodations at Thunderbird Guest Ranch.	1,573	15,844	TONTO—Box 1088, Roosevelt, Ariz.—Pueblo cliff dwellings occupied in 14th century—No camping facilities or accommodations.	4,985	41,026
CAPULIN MOUNTAIN—Box 94, Capulin, N.M.—Symmetrical cinder cone of geologically recent volcano—Picnic area, no water.	30,200	31,428	TUMACACORI—Box 6, Tumacacori, Ariz.—Historic mission—Open daily 9 to 5; picnicgrounds but no campgrounds; lodgings at Nogales.	15,289	58,056
CASA GRANDE—Box 518, Coolidge, Ariz.—Ruined adobe tower built by Indians who farmed Gila Valley 600 years ago—Guide service daily from 8 to 5; museum, picnic area; no camping facilities.	33,761	70,677	WALNUT CANYON—Rt. 1, Box 790, Flagstaff—800-year-old cliff dwellings—Monument open 8 to 5 October through April, 7 to 7 May through September; no accommodations.	13,526	58,765
CHACO CANYON—Bloomfield, N.M.—Unequaled Indian ruins representing highest point of Pueblo prehistoric civilization; hundreds of smaller ruins—Campsites and picnic facilities; guided tours; wood is scarce.	6,271	24,144	WHITE SANDS—Box 231, Alamogordo, N.M.—Dunes of white gypsum sands—Museum, picnic area; no lodging.	110,805	319,815
CHIRICAHUA—Dos Cabezas, Ariz.—Wilderness of unusual rock shapes—Camping and picnic facilities.	9,145	49,934	WUPATKI—Tuba Star Rt., Flagstaff—Red sandstone prehistoric pueblos built by farming Indians—Open 8 to 5; nearest accommodations at Flagstaff or Cameron, each 40 miles distant.	2,754	45,199
EL MORRO—El Morro, N.M.—Hundreds of historical inscriptions carved on soft sandstone monolith—Picnic facilities; guided tours.	3,208	13,057	YUCCA HOUSE—C/o Mesa Verde National Park, Colo.—Unexcavated ruins of large prehistoric pueblo—Ruins not open to public; no facilities.	172	115
GILA CLIFF DWELLINGS—Box 679, Silver City, N.M.—Well-preserved cliff dwellings—Write to superintendent before attempting to visit this very inaccessible area.	105	1,202	The following units are either recently established or where not under Pinkley's supervision at the time of his death:		
GRAN QUIVIRA—Box 18, Gran Quivira, N.M.—17th Century Spanish mission site; Pueblo Indian house ruins—Picnicgrounds; guided tours from 8 to 5.	3,113	9,051	CAPITOL REEF—Torrey, Utah—20-mile-long uplift of sandstone cliffs—Lodging and meals for limited number of guests; camping facilities, wood and water available near headquarters.	64,992	
HOVENWEEP—C/o Mesa Verde National Park, Col.—Four groups of remarkable prehistoric towers, pueblos and cliff dwellings—Monument is isolated; no paved roads, accommodations, water or wood.	168	3,152	CEDAR BREAKS—Cedar City, Utah—Huge natural amphitheater eroded into variegated Wasatch formation—concessioner operates lodge and snack bar; picnic area, water; groceries, gas and oil not available.	101,879	
MONTEZUMA CASTLE—Box 470, Camp Verde, Ariz.—Five-story, 20-room cliff dwelling 90 percent intact—Open daily from 8 to 5; limited picnic facilities; small museum.	10,645	152,661	DEATH VALLEY—Death Valley, Calif.—Famed desert wonderland—Campgrounds, lodgings; summer travel not advised; rangers patrol only main roads in summer.	334,300	
NATURAL BRIDGES—Box 98, Moab, Utah—Three natural bridges carved out of sandstone—No accommodations for travelers beyond Blanding; ranger stationed at monument during summer; roads into area rough.	741	5,325	FORT UNION—Watrous, N.M.—Ruins of Santa Fe Trail fort—Open 8 to 5 in winter, 8 to 6 in summer.	10,310	
NAVAJO—Tonalea, Ariz.—Three large and elaborate cliff dwellings: Betatakin, Keet Seel and Inscription House—Conducted tours to Betatakin; camping and picnic facilities at headquarters; supplies at local trading posts (nearest is 10 miles distant).	411	1,831	GRAND CANYON—Tuweep, Ariz.—Part of Grand Canyon of the Colorado River, not to be confused with National Park; monument reached only by primitive roads; no facilities.	515	
ORGAN PIPE CACTUS—Box 38, Ajo, Ariz.—Desert plants found nowhere else in U.S.—Two graded scenic drives from headquarters; illustrated evening programs during winter; campsites.	6,200	358,620	JOSHUA TREE—Twentynine Palms, Calif.—Great variety of desert plants and animals—Campgrounds but no fuel; complete accommodations at nearby towns.	365,312	
PIPE SPRING—Moccasin, Ariz.—Historic Mormon fort and buildings—Picnic area; guided tours.	2,245	13,620	LEHMAN CAVES—Baker, Nev.—Limestone caverns in proposed Great Basin National Park—Picnic facilities; overnight cabins and refreshments from March through October at headquarters; many beautiful campsites in adjacent National Forest.	20,321	
			PETRIFIED FOREST—Holbrook, Ariz.—Extensive petrified forest; Indian ruins—Open during daylight hours; refreshments, lunches, gasoline available at Desert Inn and Rainbow Forest Lodge near monument entrances; small picnic area and water at Rainbow Forest; no overnight facilities, camping not allowed.	713,002	
			TUZIGOOT—Box 36, Clarkdale, Ariz.—Excavated ruins of prehistoric pueblo which flourished between 1000 and 1400—Ruins and visitor center open 8 to 5; no accommodations in monument.	32,042	

Desert's September Travel

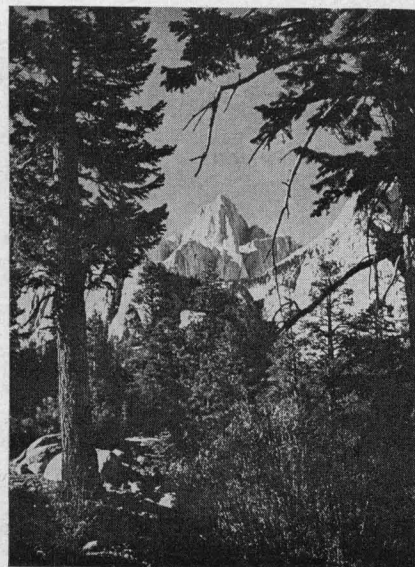


By LUCILE WEIGHT
P. O. Drawer 758, Twentynine Palms, Calif.

By THOMAS B. LESURE
6120 N. 18th St., Phoenix

YOU CAN experience the thrill of the High Sierra even if you have no time for mountain climbing. Whitney Portal (8300 feet) can be gained by driving the recently improved 12½-mile surfaced road from Lone Pine.

Whitney Portal Recreation Area, within Inyo National Forest, has private summer homes, public camps and picnic and barbecue sites under giant pines and other conifers, through which sheer 6000-foot granite walls are glimpsed. The falling, rushing waters of the south and north forks of Lone Pine Creek add music to the wind in the pines and the song of mountain birds. Falls and a beautiful little lake at the end of the road make a popular visitor center.



THE WHITNEY PORTAL RECREATION AREA.

Whitney Portal is the take off point for the 13-mile climb to Mt. Whitney, highest point in the U.S. "before Alaska." July, August and September are the best months for this hike, rangers giving this advice:

Take your sleeping bag, with supper, breakfast and lunch, and hike to Mirror Lake, 4 miles (you pass Lone Pine Lake at 2½ miles, and Outpost Camp at 3½). Here you spend the night, leave your pack and reach the summit by noon next day (passing Consultation Lake at 7 miles, Whitney Pass at 11, and finally Whitney Summit at 13 miles). Coming down, pick up your pack at Mirror Lake and return to Whitney Portal before dark.

For pack trips, reservations may be made two months in advance with Mt. Whitney Pack Trains at the west edge of Lone Pine. Wranglers will take parties of two to 30 from July 1 to just after Labor Day, on one, two or three day trips, at a cost of \$30, \$45 or \$55 respectively per person. Overnight camp is just below Mirror Lake.

Returning down Whitney Portal grade remember that uphill traffic has the right of way. Parking turnouts allow enjoyment of awe-inspiring views of desert mountains and valley. A focal point is the strangely colored remnant of Owens Lake. Owens River, which emptied into the once large lake, is almost non-existent since its waters are diverted by the Los Angeles Aqueduct, which is crossed just west of Lone Pine. Course of Lone Pine Creek as it descends and traverses the sagebrush level is marked by brilliant green cottonwood, willow and alder. On the creek is Cuffe's Guest Ranch, 4½ miles from town, and numerous modern motels and cafes are in Lone Pine.

Three miles west of town is "Hollywood's largest sound stage," the Alabama Hills. Often called the "oldest rocks," Alabama Hills are believed by geologists to be less than 200 million years old. They are composed of Triassic or Jurassic volcanics intruded by a granite type of rock. Although the odd rounded forms contrast greatly with the face of the Sierra, they resemble the upland near Mt. Whitney. They may be from that ancient landscape, the two now separated by tremendous faults and other dislocations.—END

EVERY NOW and then my wife and I like to get away from it all—beyond the range of gas fumes from the exhaust pipe of the car in front. Not long ago we discovered a road that not even many Arizonans have been across. For want of a better name, I call it "The Ghost Trail Along the Border."

The ghosts are plenty—both in towns and bygone spirits—and you won't meet a dozen cars all day. Slithering like a snake, the road curls for almost 100 miles from Nogales east to Bisbee. There's no route number, thereby insuring a certain amount of privacy. You'll find its beginning about five miles north of Nogales—at a little red schoolhouse on State 82. The dirt road meanders east along the edge of the tree-dotted Patagonia Mountains and past rutted off-shoots leading to old mines, then scoots into part of the Coronado National Forest.

White-faced Herefords blink docilely as you ramble past their mesquite thickets, and a lone ground squirrel or jackrabbit may skip across the road in protest to your invasion. As the trail climbs briefly, goose-pimpled hills ripple all the way back to Nogales, hidden amidst the ruffled land and walnut trees. Then, easing down in easy curves, you amble into Washington Camp—or what's left of a once thriving community that smelted the ore from rich mines at nearby Duquesne.

A general store with gas pump, stark concrete pylons and a sprinkling of adobe buildings are all that remain. Even the ghosts appear to be *siesta-ing*. And it's almost the same in Duquesne—just off the trail—where wind-creaking mine hoists, a few earth-filled foundations that still yield pioneer relics, and adobe homes stand forlornly at the foot of brush-dotted hills. Rockhounds may unearth a specimen or two, but pickings aren't overly rich.

Twisting along the corkscrew road, you roller-coaster to Lochiel, on the Mexican border, where Pancho Villa and his men (among others) once punctuated the scene with lead. Just before approaching the "main" part of town, you pass a large stone cross that marks the supposed 1539 entry point of Fray Marcos de Niza, first white man in Arizona. Lochiel itself, though a "gateway" to Mexico, isn't much: its frame homes, one room school and adobe ruins look out on the high fence and a sleepy white Mexican customs building that mark the international line.



SCHOOLHOUSE NORTH OF NOGALES AT START OF THE "GHOST TRAIL."

There's a somnolent mood, and that's all to the good; it emphasizes the trail's delights of getting away from it all.

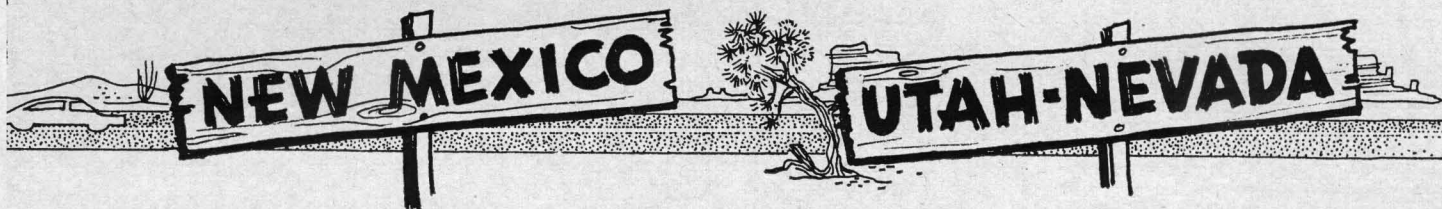
Beyond Lochiel, the trail darts from the black line of the border, angles across the big Greene Cattle Ranch, and dips into the attractive Parker Canyon region. Then, hoisting itself by the bootstraps, the road climbs up the shoulders of the towering Huachuca Mountains. At 6300 feet, it crests Montezuma Pass in

Continued on page 16

Fare:

✓ Whitney Portal
✓ Santa Fe Fiesta

✓ Border "Ghost Highway"
✓ Pete's Pass



By W. THETFORD LeVINNESS
P.O. Box 155, Santa Fe

By PEGGY TREGO
Unionville, via Imlay, Nev.

IN SANTA FE there is fiesta, and music is its soul. Brass bands play. Choral groups sing. *Tipica* orchestras, Mariachis from Mexico, and wandering minstrels are heard in the cafes, on the roped-off streets, and at scores of private parties which Santa Feans give for the occasion. It's the oldest and gayest of American folk festivals. Traditionally held over Labor Day week end, this year's dates are September 4-7.

The Spanish word "fiesta" is singular, covering a one-day celebration. In Santa Fe it's more properly "fiestas": the joy, jive and jamboree last four days. Singular or plural, the result is music—with no bars held. "The music goes 'round and 'round"—the whole city!



MUSIC IS THE "SOUL" OF SANTA FE'S FIESTA, SET FOR SEPTEMBER 4-7.

Fiesta-time begins with the burning of Zozobra—"Old Man Gloom"—on Friday evening. The Queen is crowned shortly after, and until the wee hours of Tuesday morning there's fun, frolic, and frivolity on a Brobdingnagian scale.

On a plaza platform is folk dancing—and folk music along with it. Strains of the "Raspa" and the "Varsoviana" blare forth from loudspeakers atop the historic Palace of the Governors. Dozens of guitarists and vocalists strum and yodle spontaneously on the downtown streets of the city. Bands and groups of strings perform in the endless parades, pageants and "music hours" that jam the fiesta program. There's jazz at the formal dances, and rock-'n'-roll day and night in a tent near the hub of things.

All this, of course, is noise enough to frazzle the nerves of a riveter. For those who prefer to get away for a while, there are wonderful places to go. Hyde State Park, fine for picnicking and camping, is nine miles from the plaza bandstand. Beyond is the Santa Fe Basin ski area; the chair-lift, which operates in summer, gives access to high elevations of the Pecos Wilderness. Also, there are two rewarding trips by car from Santa Fe—both take a day, and are in different directions. One is to Los Alamos via State Road 4, across the Valle Grande in the Jemez range, and back to the old capital on State Road 44 and U.S. 85. On this route are fine Indian pueblos, ruins of another which contains kiva paintings, and a crumbled mission; a side road leads to more ruins in Ban-

Continued on following page

IF YOU ARE one of those souls who looks out over wide stretches of uninhabited land and enviously traces a finger of road to the horizon, I've got a trip for you! Nevada's back country trails are all worth exploring, but Pete's Pass has more than its share of pleasures.

This little outing starts 12 miles east of Austin where Tonopah-bound Highway 8-A takes off south down Big Smokey Valley. Just south of the U.S. 50-Highway 8-A junction is a third road's beginning—a somewhat corduroy dirt road that streaks off to the southeast and the dim line of the Toquima Mountains 10 miles away. This unnumbered trail leads over Pete's Pass, to Toquima Cave, and to the flat Monitor Valley beyond.

The Toquimas are deceptively high, and a heavy forest of pinyons and other evergreens covers the almost 8000-foot summit of Pete's Pass. There is room to camp and roam in all directions, but the water supply is meager at all times of the year, and campers should bring their own. The Pete who gave his name to a sluggish little spring in these parts as well as to the pass, was a half-breed prospector who was very fond of this wild and beautiful country.

Downhill a scant mile from the summit, a small sign indicates Toquima Cave's whereabouts in the rimrock west of the road. A visit to the Cave is well worth the uphill hike, and even the worst claustrophobe need not fear this chamber, for it is comparatively shallow with a big triangular opening. It is shaped like a large tent, with sides sharply sloping from the ceiling's apex. Throughout it are traces of long occupancy by ancient Indians.

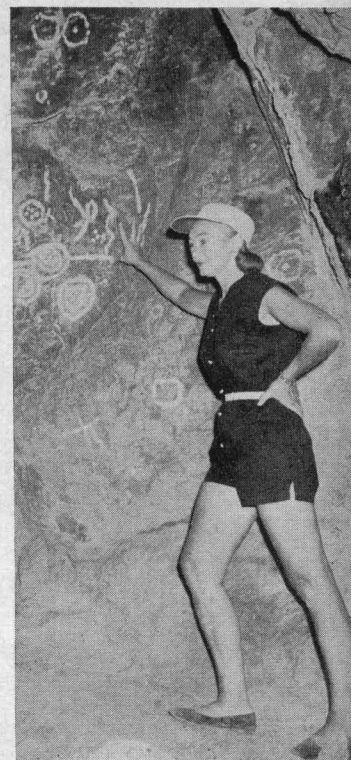
Pictographs in faded blues, yellows and reds literally cover the rock walls from a few feet off the floor to well above a tall man's reach, and the ceiling is heavily smoke-blackened.

You can see what you want to in these odd figures — there's a kind of calendar, weather record, trees, people, animals. No one who looks into Toquima Cave can avoid letting his imagination range a bit.

From the Cave, Pete's Pass Road wanders southeast down through rolling hills. A ranch in Monitor Valley is an important junction: turn southward for the long ride to Diana's Punch Bowl, Belmont and Tonopah; turn north and a rough track leads back to U.S. 50 at a point 40 miles west of Eureka.

There's a world of outdoor pleasure awaiting you on Nevada's back roads—but always be prepared! The natives, though friendly and willing to help a motorist in need, are few and far between.

By all means take Pete's Pass—as a way of getting "somewhere else," as an afternoon's excursion out of Austin, or an outdoor expedition—it is a happy road, this time of year especially. The pine-scented walk to the Cave is a cool contrast to the heat of the valleys; Nevada's few deciduous trees are turning gold and russet in the canyons, and the towering clouds of late summer add drama to the immense sweep of rugged hills.—END



AUTHOR INSPECTS INDIAN GLYPHS.

ARIZONA TRAVEL

(Continued from page 14)

the National Memorial that commemorates the 1540 exploration of the famed Spanish adventurer, Coronado.

Near here, hiking paths thread through a botanical wonderland of the 9400-foot Huachucas populated with many unusual species of plants and wandering animals. Fine but undeveloped camp and picnic sites entice modern pioneers, and there's a mood of the untouched wilderness. If you don't feel hardy, never mind. The view—encompassing the San Pedro Valley, distant Arizona and Mexican mountains—a region equal in size to several New England states—is worth the drive in itself.

Down to the valley of the San Pedro winds the road through shaded glens and dry forests. At last, fading out, our trail merges with State 92 and its hard-topped surface. Within easy reach lie the twin border towns of Naco, where the Mexican portion reflects a more *manana* spirit than does Nogales, the copper mines at Bisbee, and former Apache bastions in Cochise Stronghold and Chiricahua National Monument.

The ghost trail has vanished, yet its haunting mood lingers and beckons again.
—END

NEW MEXICO TRAVEL

(Continued from page 15)

delier National Monument. The other day's journey is to Taos through the Spanish-language villages, Truchas and Penasco, high in the "Penitente country" on State Roads 76 and 3; the return could be made on the more conventional U.S. 64—it's paved all the way and parallels the Rio Grande for a number of scenic miles.

September is the month of three New Mexico Indian fiestas, all at pueblos that are older than history. They're at Acoma, September 2; at Laguna, September 19; and at Taos, September 30. Acoma is on State Road 23; called the "sky city," it was built in pre-Columbian times on a mesa 357 feet higher than the surrounding plains. Laguna, almost as old, is on U.S. 66 nearby. Both these pueblos are west of Albuquerque, but Taos, with 900 years of antiquity in its adobe walls, is far to the north on U.S. 64. There is ceremonial dancing at all three celebrations, with racing in the early morning at Taos.

Jicarilla Apache Indians hold a pow-wow every year September 12-15 at Horse Lake; there's a "war dance" on the final day. The agency town is Dulce, on State Road 17; Horse Lake is an hour's drive over rugged reservation roads from there. It's all a half-day's trip via U.S. 84 from Santa Fe, a route which passes some of the most colorful cliffs in the nation, just south of Tierra Amarilla.

In Albuquerque, the New Mexico State Fair begins September 26 and runs through October 4. Two full autumn week ends and the five days between draw many thousands to the carnival, trade exhibits and livestock shows inside the grounds. It's all on U.S. 66 in the eastern part of the city; there are milk-stands and lunch-counters for refreshment, and trailer courts and tourist motels within a stone's throw of the main gate. Trips in the vicinity could include Sandia Crest and Tijeras Canyon, both on State Road 10 east of Albuquerque; and Isleta Pueblo, with its old mission, to the south on U.S. 85.—END

Lady Fire Spotter..

LANE ENDICOTT looked down from her glass cabin atop Verdi Peak with more than usual alertness to the thunderstorm raging below. An extended Indian summer had parched the eastern slopes of the Sierras into a veritable tinder box. The power-packed clouds, rumbling with inner charges, parted for a brief moment. Lightning bolted into the trees. A tall pine burst into flames. The most potent enemy of the forest had struck.

The lone woman lookout moved swiftly to the fire-finder. Carefully plotting a bearing on the rising smoke, she transmitted her information to the Truckee dispatcher. Within minutes an initial fire fighting attack force was on its way to the blaze. The crew throttled the fire before it could spread out of control.

Lane is a fire spotter during the summer months—mid-June to mid-October—on the California-Nevada border. Rugged Verdi Peak, rising on the sky, commands portions of the Tahoe rain forest and—on the dry side of the Sierras—the desert mountains and valleys stretching eastward. From her vantage point she is charged with surveillance of a circular area 45 miles in diameter.

For four seasons this charming and diminutive 48-year-old brunette has "manned" the Verdi Lookout. Her only companions: a German Shepherd dog, Princess; a suitcase organ; and a Bible. The other 19 stations in this district are staffed, for the most part, by husband and wife teams. Lane's outpost is the most isolated.

What does a woman think and feel on a wilderness peak, alone against the fury of a thunderstorm? Is she ever frightened?

"No," says Lane, "I have never experienced fear in relation to my work or to the fact I am isolated.

"I have experienced bitter cold and fatiguing heat. Driving winds have laced the tower with frost, snow and icicles, until it looked like an ice-bound ship. Winds often reach a velocity of 70 to 80 miles an hour."

During one siege she had all she could do to keep a few peepholes clear in the frost-bound windows while far below she could see dust rising on the parched back roads.

The sun is often unfriendly, too. In the late afternoon it beats through the windows on the west side of the

glass cabin. Then it is nearly impossible to detect anything in the valleys below.

Born in Coos County, Oregon, Lane was raised on a Canadian ranch near the Yukon. She is no stranger to the



LANE ENDICOTT AT HER VERDI "GLASS CABIN."

outdoors. She was running trap lines for her brother long before railroads, highways, electricity and piped water came to her neck of the woods. During the war she took ground school pilot training and became a pre-flight inspector of medium and heavy bombers. Occasionally she flew out with a test pilot as flight engineer.

Her first job with the Forest Service was as a clerk-typist. When Lane secured a more active outdoor role in the Service and won her Verdi lookout appointment, a few skeptics gave her two weeks to "come back to civilization." But, she fooled them, and became the first woman to wear the Forest Ranger's uniform.

Today, Lane is a highly regarded "veteran." She has learned the tricks of her trade. She knows, for instance, that "smoke" does not always mean fire. A moving herd of sheep can

By BEVERLY WALTER

raise a dust cloud that looks for all the world like a brush fire. On moonlight nights condensed vapor hanging in the canyons after a thunderstorm is deceiving. The color of smoke has singular significance. When black smoke turns to brown, the lookout knows the fire is "beginning to roll!"

Accuracy is extremely important in pin-pointing a new fire. A half-mile error in rugged terrain could mean an hour or more delay in bringing up fire fighters. And the lookout must be familiar with the "helispots" in his area—the helicopter landing fields cleared in the forest. Air borne fire fighting is proving to be extremely efficient.

On her isolated job, the lone woman lookout has learned not to anticipate regular deliveries of supplies. "The thought uppermost in my mind," Lane says, "is that whatever is on its way up is really not necessary." A patrolman tries to reach the Verdi tower every two weeks to deliver water. Occasionally an "excuse day" is granted to the lookouts—when the fire hazard is low—on which they can drive to town for supplies. Lane seldom uses her "excuse days."

Last season she brought a new Estey organ to her post. Dampness and steam in the tower gave it "bronchial pneumonia" — but not before she composed two ballads, "Dawn on the Mountains," and "Call of the Wilderness."

"Only music or an artist can describe these beautiful views," she says. "There are endless enchantments on moonlight nights. Witnessing a thunderstorm at your feet brings a vastly different feeling. Early dawn finds all the low country swathed in deep fog, every canyon filled to the brim. At sunset the wildflowers seem to be reflected in the sky—even the sun appears reluctant to leave such beauty. Evening brings peacefulness, and a balm of Gilead to the soul . . ."

Lane had wanted to be an evangelist. "I find the Bible traditionally beautiful, thrillingly alive and gloriously establishing the future." It comprises 99 percent of her reading matter during her summer tours atop Verdi.

She has witnessed from her tower the drowning of two men in the Truckee River during a flash flood, and the strange phenomena of Uni-

dentified Flying Objects. About 300 people visit Lane during a season—Eastern professors, executives from San Francisco, Nature lovers, camera hobbyists, entertainers, jeep explorers. On a single day she had visits from a stalwart lion hunter and a very enthusiastic high-mountain rare-specimen butterfly collector.

The native mountain characters also pay their respects: grouse, squirrels, fawn, mountain lion, bobcat and porcupine. A sympathetic understanding is growing between these wildlings and the woman who as a girl in Canada counted as her "duty" the killing of coyotes and hawks.

"Someday I hope to live in my own ranch home in the high country and write fiction, poetry and an opera I have longed to create," says Lane.

"But I wish," she adds, "that a poet—like Robert Service—would write a rugged he-man tribute to the fire fighters. There is no easy way to fight a fire."

For the back country explorer, the trip to Verdi Peak is a spectacular experience. The good 10-mile dirt road to the peak begins at the little mountain town of Verdi on Highway 40.

The road to the top of Verdi follows Dog Canyon. It crosses the Truckee River on an old bridge before making the slow climb to the first

Spotting forest fires from a glass perch atop an isolated mountain peak is exacting—and lonely—work.

summit. From this point the road leads through dense woods and again begins its climb, passing groves of wild aspen bent to prayerful positions by the heavy winter snows.

A few towering pine trees—overlooked by the destructive Comstock loggers of an earlier day—point toward the snow-bound span of the Sierras. State hunting camps, only inhabited during deer season, are frequent along the road.

If more than two cars pass this way in a day, the natives grumble, "Traffic is heavy."—END



CAMPER'S TAMALE PIE

1 lb. ground round or hamburger
1 large can tomatoes
1 can whole kernel corn
1 can pitted olives
yellow corn meal
garlic salt, salt and pepper

Brown meat in pan or skillet. Add tomatoes, seasonings, and enough corn meal to thicken (mixture will thicken some while cooking). Simmer about 20 minutes or until corn meal is done. Stir occasionally. Add corn and olives just before cooking is completed. — Mrs. Douglas McGill, Yorba Linda, Calif.



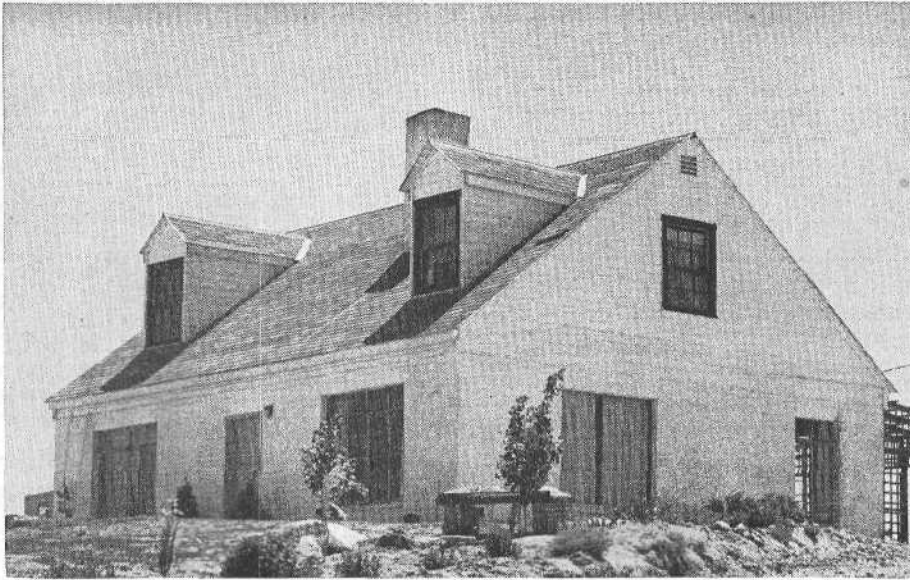
By BENN KELLER, Manager
Ford Desert Proving Grounds
Kingman, Arizona

Body Color and Interior Temperature

A car painted white, after being parked for three hours in a 100 degree temperature with the windows rolled up will be approximately five degrees cooler inside than if the same car were painted black. If the black car had the top painted white, there would be no discernible difference. If the black and white cars were moving down the highway, the interior temperature difference would be insignificant.

The amount of glass area exposed to the sun's rays has a more marked affect on interior body temperature than does body color. Usually, the more glass area, the higher the temperature. If the exposed glass area is in a near-horizontal plane (late model wrap-over windshield), higher demands are made on your air conditioning system. Body insulation added in the roof for protection against the sun's rays usually retards the rate of temperature rise inside the vehicle, but does not materially effect the terminal temperature reached after the vehicle has been parked for an extended period.

From These Hands: A Home



our family: Dad's five-acre cabinsite, a second five on which a home had been built for my mother, and the five acres that my husband and I owned—the lease having been many times renewed.

We had an easier time of it than most of our pioneering neighbors. Deke and I had lived on the desert most of our lives, and we knew all about hot days, cold nights, ants and sandstorms. We were able to temporarily and comfortably live in my father's little house. In 1950, folks who used kerosene lamps, outside plumbing and battery powered radios were a novelty, but I'm glad we had that experience.

During these "building days," our four fine youngsters did a tremendous amount of work on the house. From their father and the occasional skilled workers we hired, they learned how to work with mortar and bricks, lumber and nails. Painful experience taught them the price of a job carelessly done.

It never occurred to Deke and me that our children might become delinquents. We all were much too busy during the day—and too tired at night—to worry about such things. When their friends came to "play," it was often with hammer and nails.

These same youngsters frequently come to see their handiwork, and it's easy for them to feel at home in a place they helped to build. One boy who took part in the laying of cement blocks carefully made note of the fact in the wet concrete. He often checks to see if "Houlihan's Corner" is still in existence, and, of course, it is. A girl who helped our daughter paint her bedroom made a little plaque and hung it by the door. It reads: "God bless this house."

Three of our children are now away at college, but our planning and building continues. The boys started a swimming pool last time they were home.

Las Vegas' amazing growth has surrounded us with homes, highways and business zones. The University of Nevada is building its southern campus a half mile away. A golf course is developing near our back yard. The landscape has changed so much that one of my out-of-state brothers had a hard time finding us on a recent visit.

Our property—really Dad's property—was not in an approved home-loan area, so we had to pay cash for every bit of building material and labor that went into our house. Owning this seven room, two bathroom home free of government or loan encumbrances gives us a wonderful sense of security. But we derive the most pleasure from the secret that the building of our home revealed to us: dreams really do come true if you never stop dreaming—and working.—END

MY FATHER had a dream that was passed down to me: to build his own home on his own land with his own hands. Some two decades ago—in the '30s—wary from years of tramping the hills as a prospector, he pitched his tent beside a mesquite tree a few miles from the then sleepy village of Las Vegas, Nevada. "This will be the place," he thought to himself. His location was near a sandy wash in which smoke trees, desert willows and mesquite grew thick and green.

Dad measured off 40 acres and sent an application to Washington, D.C., for a homestead. Without waiting for approval he built a shack, drilled a well and cleared part of the remaining land.

Several months later he received word from the Bureau of Land Management that his land was not open for agricultural homesteading. It was classified for distribution in five-acre parcels—single-family desert cabin homesites.

Undaunted, Dad "opened negotiations" with Uncle Sam. A friendly BLM agent cleared the way for the old prospector, his wife and each of his five children to file again on portions of the "ranch"—five acres apiece multiplied by two adults and five children, for a total of 35. The property, the agent said, would be ours in time—but we had to build homes on each of the parcels!

Fifteen years passed. Dad was gone. World War II had come and gone. Seeds of many desert wildflowers lay dormant for years before the proper weather conditions come about to help them germinate and flourish. The same can be said of the Las Vegas home my husband and I now live in. Before that home started to "grow," Deke and I had four children!

When we returned to Nevada after the war, only 15 acres of the original 35 remained in

A Nevada
woman
realizes
a long-held
dream
when she
builds
her own
home . . .

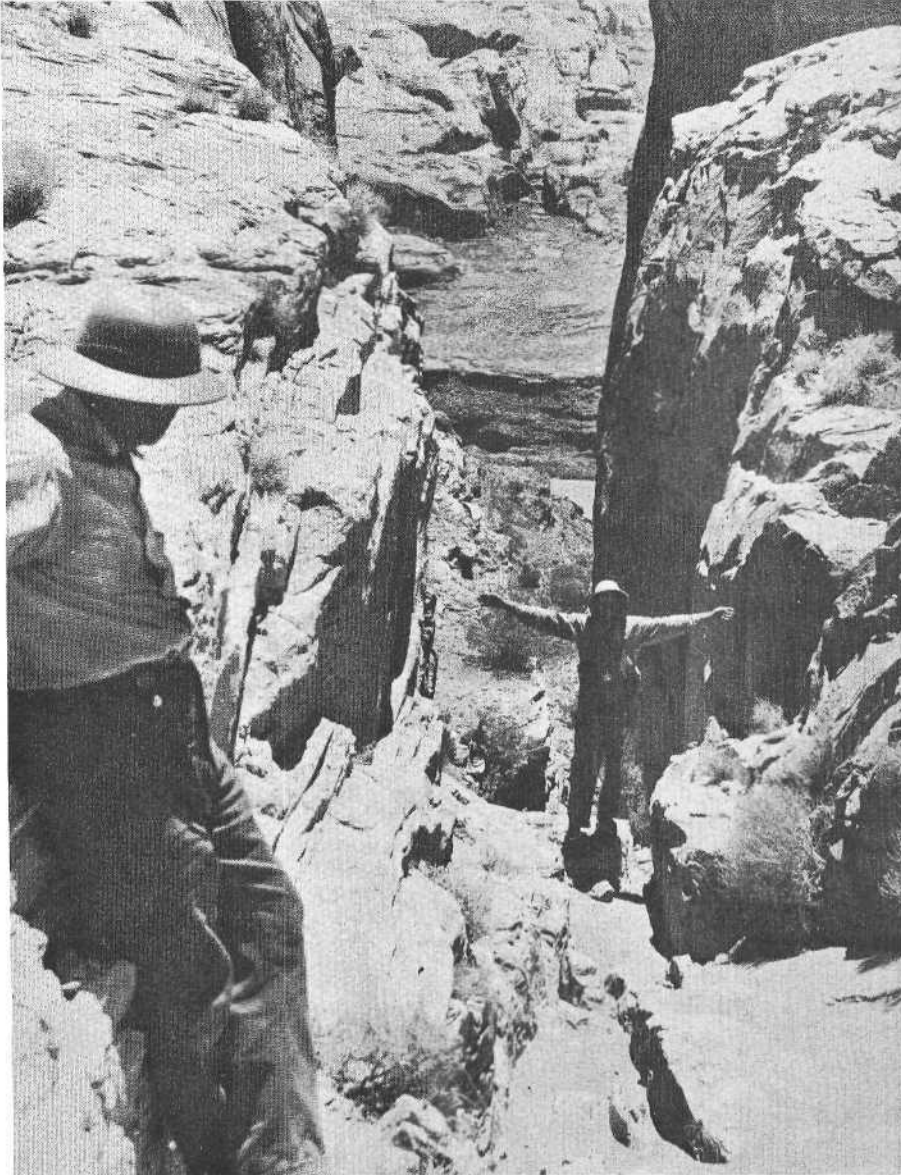
By
CELESTA
LOWE

*"No pioneer company
ever built a wagon road
through wilder,
rougher country . . ."*

HOLE- IN- THE- ROCK

by David E. Miller

. . . Professor of History at the University of Utah, a specialist in Great Basin history and the foremost authority on many phases of that history—particularly the courageous Hole-in-the-Rock expedition. Dr. Miller's many years of research on this crusade were culminated in the recent publication of the authoritative book, *Hole-in-the-Rock* (University of Utah Press, \$5.50).



HOLE-IN-THE-ROCK LEADING DOWN TO THE COLORADO RIVER. (Univ. of Utah Press Photo)

THE HOLE-IN-THE-ROCK represents the most spectacular pioneer road-building project in the history of the West. Present-day visitors to the site find it difficult to believe that the narrow steep slot which gave the expedition its name was ever used as a wagon road. But it was. For more than a year it served as the major highway between San Juan County and other southern Utah settlements. Wagons went both ways over it—up as well as down—hundreds of them!

The people who built that road were home builders of the highest quality who brought civilization to a part of the West and made the desert blossom as the rose. They were a band of some 250 men, women and children called on a mission by the Mormon Church to plant a colony in the Four Corners area. Carrying their household goods and tools in 83 wagons, and driving several hundred cattle and horses, the expedition left southern Utah settlements late in October, 1879.

Leaders of the mission decided to blaze a new wagon road between the frontier hamlet of Escalante and the present site of Bluff. But the proposed route had not been adequately explored; progress was painfully slow; mid-December found the company facing the Colorado River, halted by the sheer west wall of Glen Canyon. Exploration disclosed a narrow crack in the canyon rim—not wide enough to allow passage for man or beast. Three quarters of a mile distant and 1500 feet below, was the river which

might be crossed if wagons could somehow be wheeled to its west bank.

The men of the company eagerly set to work with chisels, picks and shovels to widen that crack into a passable wagon road. Some men were lowered over the cliff in half-barrels and dangled in mid-air as they hand-drilled shallow holes for blasting powder which was available in limited quantities.

Superhuman effort finally brought the road to completion, and on January 26, 1880, after six weeks of back-breaking toil, the first wagons were driven down the crevice. Contrary to some accounts, wagons were not dismantled and carried down piece by piece. Every vehicle was driven down with horses or oxen hitched on the front and a dozen or more men hanging on behind. It was a hair-raising experience; yet not a wagon was lost in the perilous descent through the Hole-in-the-Rock.

Once across the Colorado the company still faced 150 miles of the roughest, wildest, least-known country in America. But the courageous pioneers pushed forward up Cottonwood Canyon, up the Chute, down Slick Rock, across Clay Hill Pass, and out to the desert, overcoming one obstacle after another until they reached the site of Bluff on April 5, 1880. The trek that was expected to take six weeks had stretched out into almost as many months.

Continued ➤



Tracing the Trail Today

Boulders, piled on the sloping bare rock hills (above), mark part of the Hole-in-the-Rock route near Cheese Camp. The remains (left) of a Mormon wagon which used this trail lie atop Gray Mesa. Don Barton, grandson of one of the expedition's members, examines the still-solid oak and hand-forged iron fittings. Even today most of the Hole-in-the-Rock trail is accessible only by jeep or horseback.

PHOTOGRAPHS BY CHARLES E. SHELTON



Green Water Spring (above) is as important to cattlemen today as it was to the pioneers who made the Hole-in-the-Rock trek 80 years ago. The Chute (right) typifies the rugged rock terrain the route encountered after leaving the Colorado River. A "dugway" (below) was blasted down Slick Rock Hill to get the wagons and stock off Gray Mesa.

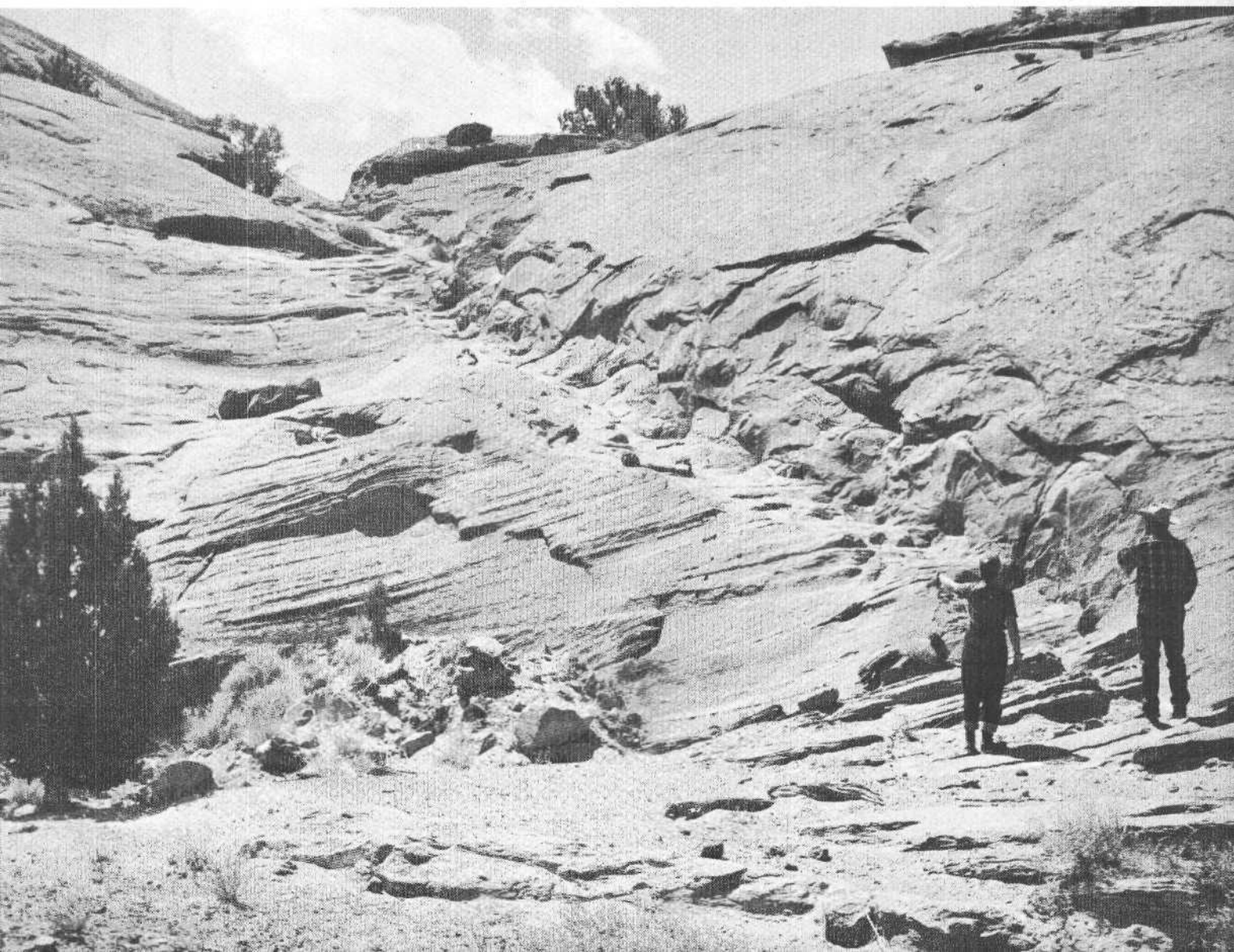


Photo of the Month

The Sunny Side of the Cliff

"It was the end of summer—Labor Day to be exact. The time was late afternoon. Our vacation in Arizona's Red Rock Canyon was nearing an end. On the last day we drove out on an inviting and little-traveled dirt road, and there saw 'the sunny side of the cliff'.

"While my seven-year-old son went off to search for meteorites' (he had visited the Meteorite Museum in

Sedona and was impressed), I took the photo of the carefree road, the sunny cliffs, the gathering storm clouds.

"My camera was a Rolleiflex. I used Verichrome film, f. 22 at 1/100th second."

SHERRY COLE
Lakewood, Colorado



Time is running out on the Southwest's primeval art treasures—the pictographs and petroglyphs left by ancient inhabitants of this land. To Artist Charles LaMonk, portraying these symbols is challenging work.

By ETHYLN PAIGE GORSLINE



COMMERCIAL ARTIST Charles LaMonk is doing more than verbally advocating the protection of Indian hieroglyphics; he is reproducing these symbolic reminders of the past with an incredibly accurate technique. His collection of petroglyph (incised symbol) and pictograph (painted symbol) paintings is a valuable record of the seemingly doomed "originals."

Time and the elements—and vandals — are taking their toll of the "rock drawings" found on ledges and cave walls in many parts of the Southwest. Whether representing directions to water, or appeals to the gods for good fortune, or mere "doodles," these Indian rock writings are worth saving. "Here is the only pure American abstract art," says LaMonk. "It is completely untouched by European influence."

Dedicated Worker

The artist has devoted week ends and holidays for the past several years to reproducing hieroglyphics. He also finds time to personally show his work at museums and to study groups. I first met him at an informal showing of his paintings. What started as a prosaic talk suddenly became an adventure as LaMonk, ordinarily the quietest of men, warmed to his subject. His enthusiasm seemed to carry us into the caves and canyons. We could almost hear the dull "clunk"

of prehistoric hammers as the cryptic figures were chiseled into the stone.

LaMonk, a sturdily built man in his 40s who now resides in Palmdale, California, spent his boyhood in a log cabin in Wyoming. Indians were a common sight, and young Charles delighted in depicting them in whatever media was at hand. Years later, when he moved to Southern California, he studied art, specializing in Indian portraiture. A few painting trips into the desert introduced him to the challenge of reproducing glyphs, and what started as a hobby soon became a dedication.

LaMonk's Technique

At first LaMonk's rock writing reproductions were on a flat background. He succeeded in matching the usually dull colors of the base rocks, but failed to give a realistic impression of their age and texture. Practice and experimentation led to a simple solution—he uses the very base the earlier artists used.

Arriving at a picture site, LaMonk spreads his masonite "canvas" with a heavy coating of white lead. While this is still wet he gathers eroded sand and dust from the base of the picture rock and spreads it over the lead. The embedded sand becomes an authentic background for the reproduced painting, only needing smoke stain shadings to look exactly like the parent rock-base. LaMonk makes several of these

background boards the first day of his stay in the wilderness, and by the next morning they are sufficiently dry to use.

He reproduces petroglyphs—the incised symbols—by painstakingly building up layers of rock particles on his medium until they are deep enough to allow him to duplicate the intaglio. Pictographs, on the other hand, are painted onto a simple base.

After experimenting with every conceivable brush material, LaMonk found that deer hide, rolled on a stick about one-half inch wide and four inches long with the end frayed and made pliable, gives an almost perfect replica of strokes and dots found in the rock paintings.

Duplicating the colors used by the ancient artists is not difficult, LaMonk says, since pigments in present-day paints are obtained from the same sources used by ancient artists. Red and yellow ochre is abundant in many localities. Black was made by charring bones of animals to give a density matched by modern "bone black." White might be of mineral origin or made from powdered sea shells.

Art That Endures

A surprising characteristic of prehistoric colors is their penetrating and lasting qualities. This indicates that a binder must have been used—perhaps animal blood, the yolks of bird

eggs or glue made by boiling deer hoofs.

"There are skeptics," says LaMonk, "who claim that these glyphs are merely the doodlings of early-day Kilroys, but I do not accept this theory. Too many identical figures appear in widely separated areas."

Concentric circles, for instance, are found throughout Utah, Nevada and California. Wherever they occur LaMonk has found a source of water nearby. Was the design inspired by the widening circle made by a pebble dropped into a pool, and hence the symbol of water itself?

The elusive bighorn sheep were a favorite subject for both painters and peckers — possibly because barbecued sheep was a deluxe entry on the menu of early tribesmen. LaMonk tells of finding many pictures of sheep, followed by stick figures of men with outstretched arms. Often these paintings were made in the vicinity of hunting blinds. Such pictures, some archeologists believe, were the record of successful hunts. Others say they were a sort of picture-prayer, inscribed before the hunt as a petition for success.

Trying to date the historic drawings is complicated by the fact that at least three distinct cultures may be represented at many cave sites. Some paintings are on walls covered by layers of soot that must have taken centuries to accumulate. Under this blackened grime are earlier paintings.

Picture sites, like gold, are where you find them, says LaMonk. To reach those in the best state of preservation usually requires several miles of leg work over difficult terrain.

The earliest American artists seem to have delighted in creating masterpieces in places that were the hardest to reach. LaMonk found pictographs in a cave so small that in order to sketch them he had to slide in head-first, on his back, the ceiling only a bare eight inches above his face.

Other LaMonk paintings have been copied from rock faces where he had to balance on toe-holds with his drawing board braced between his body and the ledge. While he sketched with one hand, a companion lying on a shelf above steadied him by grasping his other arm.

LaMonk notes a growing trend by

modern home decorators to use his glyph paintings on the walls of their homes. However, his main interest is in preserving the ancient drawings in the interest of science. And he goes about his work with a sense of urgency.

—END

True or False

Sharpen your pencil — and your wits —

it is quiz time again. Here is an only slightly painful way to learn more about the Southwest—past and present. If you answer 13 to 15 correctly, you score "fair"; 16 to 18 is good; 19 or a perfect score is excellent. Answers are on page 37.

1. Barry Goldwater is the present governor of Arizona. True.... False....
2. The Zuni Indians, noted for their pottery and turquoise inlay jewelry, are farmers by tradition. True.... False....
3. The copper mines at Ajo, Ariz., and Santa Rita, N.M., are both open pit operations. True.... False....
4. Indians almost exclusively used stone for their arrowheads. True.... False....
5. Arizona was once part of New Mexico Territory. True.... False....
6. 13,145-foot Boundary Peak receives its name from its location near the Nevada-Oregon state line. True.... False....
7. The evening primrose is known in the Southwest in both a white and yellow flowering species. True.... False....
8. The given name of the famous scout, Kit Carson, was Christopher. True.... False....
9. The silky sheen on the petals of cactus blossoms is known as "desert varnish." True.... False....
10. To the Navajo, a "chinde" is an evil spirit. True.... False....
11. Philip St. George Cooke was the first and most successful large scale mine operator on the Comstock Lode. True.... False....
12. The Yaqui Indians of northern Mexico have long been extinct. True.... False....
13. Because of its willowy appearance, the catalpa tree is commonly known as desert willow. True.... False....
14. The gem stone garnet is found in a variety of colors. True.... False....
15. Tex Rickard promoted the 1906 Gans-Nelson fight in Goldfield, Nev. True.... False....
16. If you own a "dop stick," chances are your hobby is lapidary. True.... False....
17. Desert tortoises normally hibernate during the winter months. True.... False....
18. The Wasatch Mountains are visible from Salt Lake City. True.... False....
19. The Spaniards taught Southwest Indians how to mine and make ornaments from turquoise. True.... False....
20. San Xavier del Bac is Albuquerque's oldest mission. True.... False....

ARTIST CHARLES LaMONK HAS PERFECTED A UNIQUE TECHNIQUE FOR COPYING ROCK WRITINGS.



READER RESPONSE

Artist's Function Fulfilled . . .

Desert:

I am enthusiastically in favor of using paintings as cover subjects.

The work of both Marjorie Reed last January and Brownell McGrew in the July issue hold great appeal for me and it is a great relief to know that something besides abstract painting is still being done these days!

The strange lights on the realistic work of McGrew are something that does not show up in photography, yet they are something one feels or sees in his mind's eye in the desert landscape. Consequently his painting provides that interpretation of the desert which photographs cannot provide. Miss Reed's work likewise provides another interpretation that photography cannot. Of course, I suppose I am simply pointing out what the painter's function is in art, or at least what one of his main functions is.

Allow me also to congratulate you on the new arrangement of subject matter. You are certainly bringing about great improvements to an already superb and unique magazine! The new desert travel section is most welcome.

RICHARD L. DAY
Department of Geography
University of Illinois
Urbana, Illinois

Only a Lens Will Do . . .

Desert:

I must disapprove of your plan to use oil paintings for cover subjects—this is no reflection on the respective abilities of artists Reed and McGrew.

It appears to me that in order to capture the true life and spirit of the desert, a photo lens is the only media. An artist usually and naturally interprets the subject matter through his own eyes, which may cause possible distortion. The artist's various moods also may lead to indefinite extraneous coloring and destruction of fine detail in his work.

The desert is one of the very last earthly strongholds of truth and beauty, and its wondrous moods should not be permitted to escape mankind.

H. BLYE
Long Island, New York

Paintings "Superb" . . .

Desert:

Please do go ahead with your plan to occasionally use paintings as cover subjects. July covers were superb. Your magazine is the only connection I now have with the Desert Southwest.

H. P. GAVAN
Norfolk, Virginia

Photos Are Factual . . .

Desert:

. . . I would like to go on record as definitely favoring photographs rather than reproductions of paintings on your covers.

Photos are actual reproductions of the subject, and show us exactly how the original scene looks. In paintings there can be some flexibility of the facts—sort of "poetic license," one might say. Paintings may be "prettier," but not factual.

C. I. KANAGY
Los Angeles

Gilding the Lily . . .

Desert:

Using paintings on your covers is no good. Why try to gild the lily?

ALFRED G. GASSER
Glendale, Calif.

Art Convert . . .

Desert:

Until the July issue, my answer to your editorial query concerning the use of oil paintings on *Desert* covers would have been negative. I had yet to discover an artist who, I felt, was able to translate the meaning and beauty of the desert country to canvas and oil. But now my answer is a wholehearted "yes"—if you can use more of Brownell McGrew's paintings. I only wish I could have one of his paintings for my own that I might feast my eyes on it at will.

MARTHA J. MALORY
Tucson

Hopi Paradise . . .

Desert:

Sentimentality and impressionism seldom result in accurate conclusions. I refer to Randall Henderson's editorial in the June

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WETHERILL INN KAYENTA ARIZONA

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ROSCOE G. WILLSON'S STORIES OF OLD Arizona days, tales of badmen, cowboys, marauding Indians, lonely settlers pushing Westward in the days before the turn of the century.

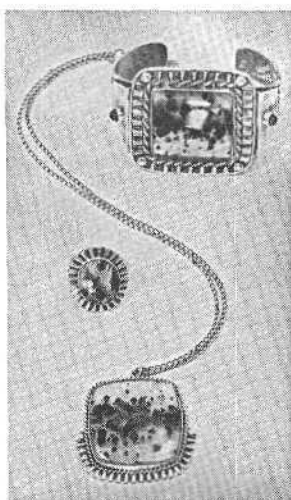
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KAMP-PACK means foil-wrapped, low moisture, easy to pack food for all sportsmen, hunters, campers, fishermen. Tested on safari in Africa and expeditions in Alaska, KAMP-PACK foods are proven non-perishable, easy to carry by boat or foot!

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Please send me complete information and price list for KAMP-PACK foods.

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Desert in which he deals with the Hopi: "the Hopis . . . somehow eke out a living in one of the most arid sectors of the American desert. It is generally assumed that they chose the barren mesas of northern Arizona for their homes because those lands are so fruitless no other tribesmen would ever covet them."

This statement is entirely incorrect. I quote verbatim from *The Changing Physical Environment of the Hopi Indians of Arizona*, by John T. Hack, Reports of the Awatovi Expedition, Peabody Museum, Harvard University:

"The Hopi Country is superior to other areas nearby for agricultural settlement by a primitive people. It has a better surface and ground-water supply, and it resists better the devastating effects of climatic change. The region seems on first acquaintance to be a barren, wind-swept desert but paradoxically it is this barrenness which constitutes its superiority. Its exposed position and broad valley flats enable the wind to pile up huge mounds of sand which inhibit arroyo cutting, allow flood-water to spread, and provide a permanent ground-water supply in or beneath the large dune areas."

Apparently Henderson is speaking about the Hopi country, as Hack puts it, "at first acquaintance." Anyone who has done even a little hiking in this Hopi country, or who has done any reading on the geology of this area, realizes that the so-called barren desert is underlain by a sloping stratum of shale that catches most of the rainfall of Black Mesa and keeps it at a convenient subterranean level at the foot of the Hopi mesas.

I would, while I am at it, like to question the wisdom of displaying on your front cover (June) an inferior type of kachina doll, the mass manufacture of which, by machine methods in whole or in part, is doing a great deal to damage the demand and production of genuine Hopi kachinas which really bear little resemblance to your cover picture. This type is manufactured for the tourist trade.

FRED B. EISEMAN, Jr.
Manchester, Missouri

(Henderson was comparing the Hopi country — where a waist-high corn stalk is considered "tall" — to the greener lands from whence these Indians migrated in ancient times; not to "other areas nearby."—Ed.)

Testing a Meteorite . . .

Desert:

The short item a "simple test to distinguish meteorites" (page 37, July issue) is very misleading. The magnet does not constitute a final test for iron meteorites. Smelter slag often contains metallic iron and may be just as magnetic as any nickel-iron meteorite. Also, the mineral magnetite often occurs in irregular lumps which strongly resemble meteorites; and sandstone is sometimes indurated by magnetite.

There are scattered about thousands of

pieces of steel and cast iron from broken machinery. These rust and scale off, their corners and edges becoming dulled and rounded until the pieces sometimes resemble in form true meteorites. Naturally, they are attracted to a magnet.

Microscopic and chemical tests must finally determine whether a specimen is a meteorite. The American Meteorite Museum has always made these tests free of charge; but we do not want our mail flooded with everything that the magnet attracts.

H. H. NININGER
American Meteorite Museum
Sedona, Ariz.

What's in a Name? . . .

Desert:

There is coming into vogue among many the very bad practice of referring to Lower California or Baja California (as the Mexicans say it) as "Baja" which, of course, merely means "lower." It is somewhat akin to referring to Southern California as "Southern." It seems a shame and undignified to refer to a land so rich in interesting history and unique scenery, and with a fauna and flora so varied and bizarre, under the mutilated and atrocious nickname of "Baja."

I am sorry that in my article in the July *Desert Magazine* the word California was in several places edited from my manuscript so that I too appeared before my readers to sanction and be using this mutilation of the name Baja California.

EDMUND C. JAEGER
Riverside, Calif.

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While Traveling the Desert**

- Heavy gauge all-aluminum exterior
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- Weighs 400 lbs. complete

Investigate before you buy

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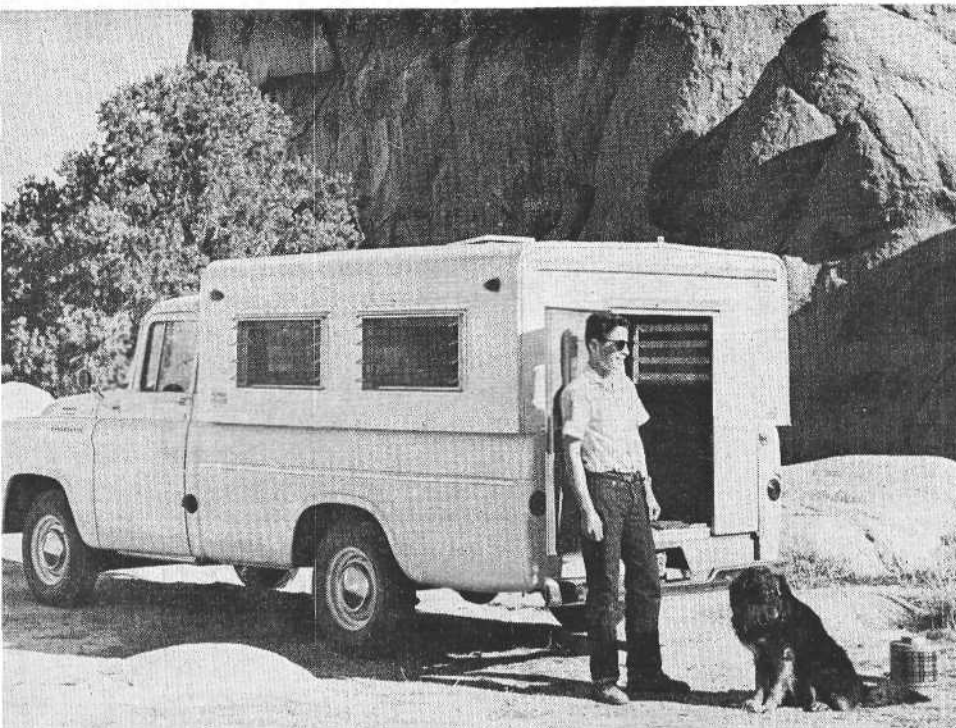
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CAMPING THE *Portable* WAY

By JOE H. WHERRY

PORTABLE CAMP COACHES HAVE INVADED HITHERTO "RUGGED" DESERT BACK COUNTRY AREAS.

FEW AREAS in the nation offer such variety for family relaxation as do the vast desert regions of the Southwest. From sea level to mile high, playgrounds beckon to us. Unfortunately, the remoteness of some of our finest desert areas makes a prolonged stay, even for a few days, a bit of a task when one must provide accommodations for the average family.

A new type of home-on-wheels—the portable camp coach—is bidding strongly for recognition as an ideal Southwest home—away-from-home. Take a pickup truck and add to this basic three passenger vehicle a camper body that becomes a semipermanent part of the pickup, and you have your portable camper.

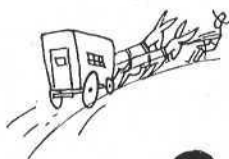
A couple of dozen manufacturers of these camper bodies are located in the Southwest, predominately in the Los Angeles area. Their adaptable creations offer several distinct advantages worth considering. When attached to the pickup they become an integral part of the machine and, hence, no additional license is required. Additional brakes and stop lights and turn signals are unnecessary, and it's perfectly safe for two or three members of the family to ride in the camper body.

On the road the handling characteristics of the pickup under average driving conditions are affected only slightly by addition of a camper home. The vehicle's balance is maintained satisfactorily if care is used to install gear well forward in the camper.

There are two basic types of camper bodies: on the lower end of the price scale are the simple shells which convert the entire pickup bed into an enclosure; more elaborate are those

equipped with everything common in a 12 or 14 foot travel trailer including butane stove, sink, ice box, folding table, clothes closets, cupboards, and beds that fold out of the way when

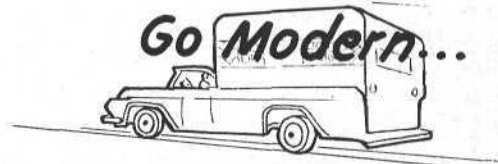
Go Farther...



Go Faster...



Go Modern...



GO CAMPER!

Go relaxed in a Portable Camp Coach. Whether you are rock collecting, exploring ghost towns or a lost mine site, or just enjoying the beauty of the Desert—go farther, see more, the fast, dependable way with a Portable Camp Coach. No towing problems, no restrictions . . . the versatile way to travel the Desert.

Look for the PCCA seal. It is your assurance that the manufacturer is giving you the best in quality construction, integrity in business practices and will stand behind his individual guarantee. Write today for further information and a list of PCCA members.

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P.O. BOX 693

POMONA, CALIFORNIA



not in use. Some models even have showers.

Some units, stripped to the bare minimum, cost as little as \$200, while the moderately priced jobs have beds and mattresses and small shelves for from two to four persons. These are short, made to exactly fit the dimensions of the pickup beds which are either 6 or 8 feet long, and range in price from \$495 to \$825. As there is no overhang at the rear or forward extension over the cab, the interior offers limited space, but enough for beds and the storage of equipment under the bunks. Being shorter, these are naturally the most compact and the easiest to garage. To overcome the disadvantage of small size, several manufacturers have contrived some ingenious features to give the effect of more living space.

Shade, Head Room

One model, for example, has a canopy that slides to the rear to provide a self-supported shade for increased camping pleasure. Another unit costs about \$600 and has sides that raise and a clearstory section of roof that is cranked upwards from the inside; this increases headroom and assures ventilation on hot nights. Equally novel and practical is another unit (\$695 and up) with a roof that tele-

scopes vertically to allow more than six feet of interior headroom. The latter, on special order, can be had large enough to fit a 10-foot truck bed.

Longer, roomier campers have overhangs extending two feet or so to the rear of the pickup bed. The extra length allows for the practical, if compact, installation of the galley with closets and cupboards. Some units can be ordered with a chemical toilet already installed. These longer models, costing about \$1100, can be ordered with just about any interior arrangement desired. The appliances and clothing closets are built in at the rear of the unit along each side. Toward the front is a table and folding overstuffed dinette benches. The latter make up into a comfortable double bed. Overhead there is another twin-sized bed across the front.

Even longer models — known as "cab-overs" — extend over the pickup's cab allowing still more space for beds. Water pumps, tanks that hold up to 15 gallons of water, wide picture windows on each side are other deluxe features. In most cases everything comes installed, although optional extras sometimes include window curtains, paper towel racks over the sink, and louvered windows. Alu-

minum screens are commonplace. Interior lights operate off the pickup's electrical system, as do the outboard riding lights on the larger models.

Built to Last

Construction is exceptionally rugged and in most makes kiln-dried white pine is used for the basic framing. This is screwed and glued together with the sort of fine craftsmanship that distinguished the coachbuilders of years ago. Marine-type plywood forms a structural skin and a smooth interior. Aircraft aluminum sheathing then is used to cover the exterior, with the pocket thus formed filled with spun glass or other insulating material. In this manner a wide variety of interior

Pick up . . .

COACH CAMPER

Fits any pick up.
Compact, efficient.
Sleeps 5 to 7
GALLEY . . .
6' 1" HEADROOM
PRICED FROM \$895



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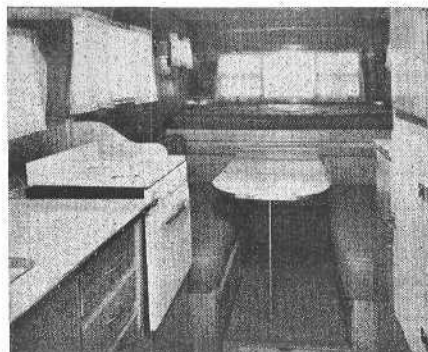
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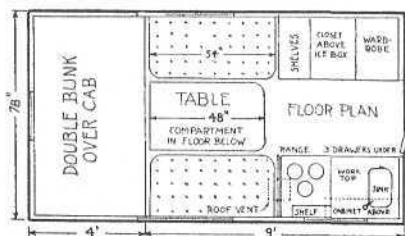
**GO EXPLORING, ROCK COLLECTING
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A modern, comfortable, dependable, and economical way to travel. Enjoy traveling the desert with all the convenience of a mobile home. THE ROMER is equipped for the modern road or the pioneer trail. Engineered and balanced to carry as lightly as a cloud.



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finishes—birch, ash and even mahogany—have been employed to make the campers just as luxurious as the finest trailers.

Every means possible to provide the right combination of strength and light weight has been tested. Structurally, wood offers almost as much durability as steel, and generally with decreased weight. Once 1000 pounds is exceeded, it is wise to go to the larger ¾-ton pickups in order to maintain good over-the-road performance.

Easy to Remove

Camper bodies are attached to the pickup with bolts after holes have been drilled into the top flanges of the bed. Removal is relatively easy; most camper body builders will supply, at extra cost, a set of four tall jacks. Much like car bumper jacks, these are placed at each corner of the camper which, after the attaching bolts have been removed, is then lifted straight up an inch or two and the pickup is simply driven out from beneath. It is becoming fairly common to spot camper bodies suspended on these spidery jacks in backyards and driveways in suburban cities.

Some owners have gone even further with self-installed air-conditioning, television sets that operate, through a converter, off the pickup's battery, and similar luxuries. Other owners have banded together in clubs with mass trips to areas of interest. Rockhounds, artists and just plain everyday people who love the outdoor Southwest have discovered they can have a second car—the pickup—and their "desertravel" home-away-from-home for less than they would pay for a cabin.

Camper Boom

According to the best figures available at this writing, something like 1500 of these campers, all makes and sizes, are currently being produced each month in Southern California. The business has become so competitive that more than one maker has franchised pickup dealers. Some of the latter—and you can readily spot them by watching the advertisements in your newspaper—are offering low priced campers free with the purchase of a pickup at list price, and they are selling pickups in this manner when selling the truck alone is sometimes too cut-throat a proposition.

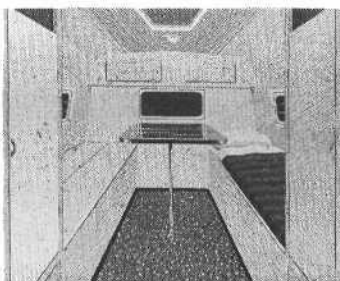
And more than fun, some folks are even making money with these rigs: at the recent Turtle Races at Joshua Tree one enterprising couple was dispensing hot dogs out the tail end of a camper all fitted out as a traveling lunch wagon!—END



Now you can travel the Desert Southwest with perfect comfort. No strain on the budget! Carry your living and sleeping accommodations right along with you.

12 IMPORTANT FEATURES

- Beautiful finished all ash interiors
- Two under-seat storage chests
- Full length, key-locked door
- Custom-built for your truck
- Ribbed Aluminum exterior
- One inch fiberglass insulation
- Louvered, screened windows
- Two dome lights
- Linoleum floor
- Formica-topped table
- Two handy front cabinets
- Two rear utility cabinets



Interior of Deluxe Kamper
Standard Kamper—available for short-bed truck \$395 and ½ ton long bed truck \$420.

GET INTO THE DESERT with... KAMPERS KABIN



The DELUXE KAMPER offers even more utility and convenience with the following DELUXE appointments:

- Ice box and Storage Cabinet at the rear, easily accessible from outside the Kamper.
- Two Louvered Windows on each side
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- Assist Handle at the entrance door
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Deluxe Kamper
Recommended for Long-Bed ½ or ¾ ton **\$525.00**
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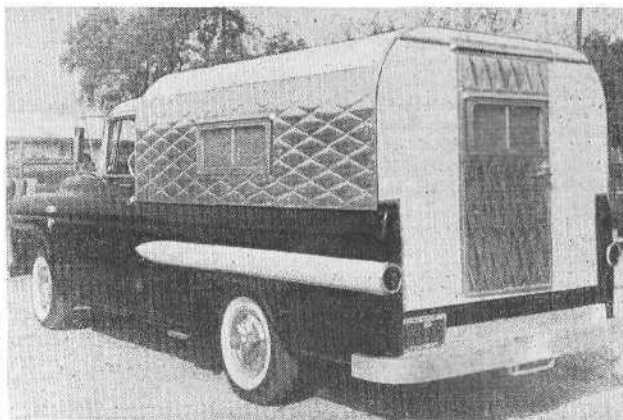
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BY ONE MAN IN ONE DAY

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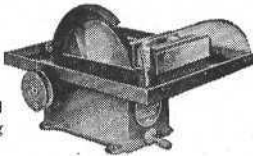


BUY THE BEST
FOR LESS

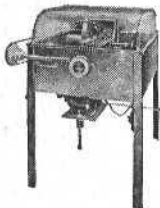
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Range from 4" to 24" in
Light, Standard, Heavy
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Compact and
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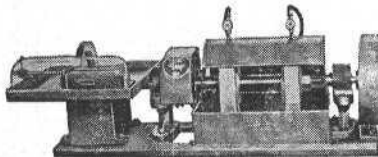
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Highland Park Power-feed
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Available in all sizes. Perfect Combination
Unit for Lapidary work. Handles sawing,
grinding, sanding and polishing. Excep-
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Arbors of all sizes — Tumblers, two
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Lapidary units in two different sizes.

32 MODELS TO CHOOSE FROM

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SAN GABRIEL, CALIFORNIA

SOUTHWEST NEWS BRIEFS

Summer's heat only slowed down
man's invasion of the great South-
west Outdoors. Most innovations
bearing the stamp-of-man were de-
signed to make life easier for the
traveling tourist.

Three new viewing platforms are
being built on the north rim of Me-
teor Crater near Winslow, Ariz., and
Meteor Crater Enter-
prises, Inc., has still grander plans
in mind to make viewing of the giant
hole in the northern Arizona plain
a pleasant and untroubled experi-
ence. A curio shop, restaurant and
44-foot-high viewing tower are pro-
posed—plus an aerial tramway link-
ing rim with crater floor, 570-feet be-
low. Meanwhile, work continues on
improvement of foot-trails along the
rim and down into the crater.

The Bureau of Indian Affairs
awarded a \$400,000 contract for con-
struction of nine
miles of highway on
the main Navajo
Reservation route passing through
Monument Valley. This initial job
will run north from Tuba City, Ariz.
In time, pavement will stretch be-
yond Kayenta to the Utah state line
to join the already-paved road to
Mexican Hat.

The Navajos also are toying with
the "soft way." Window Rock, the
Navajo capital city,
is being done-over
by professional com-
munity planners. Supermarkets,
drive-in movie theaters, winding resi-
dential streets and a fairground are
proposed. The planners are wisely
leaving one facet of the Window
Rock of Tomorrow to the Indians
themselves: When a Navajo goes
visiting, he usually brings along his
sheep; the Indian in modern Win-
dow Rock, said one planner, must
decide whether he wants to con-
tinue maintaining enough space
around his city home for visiting
sheep.

Columnist Bert Fireman of the
Phoenix Gazette is all for "disposing
of the phony leg-
endry of the Lost
Dutchman Mine."

Bert feels county and state taxpay-
ers are bearing an unreasonable
burden when rescue squads are
forced time and again to go into the
rugged Superstition Mountains after
amateur lost mine hunters. Con-
cludes Bert: "... we cannot cease
hoping that our fellow citizens will

wise-up to the disservice being done
to those who succumb to the lure of
lost gold."

In a renewed effort to protect the
public against purchase of imitation
Indian arts and
crafts, New Mexico
has placed a new
law in effect. It amends and re-
places a similar (1957) act which
was ruled unconstitutional. The new
law requires imitation products to
be so labeled. Fines up to \$100 and

**Fake
Arts-Crafts**

**SEARCH FOR
LOST TREASURES
OF THE WEST ...
TREASURE HUNT
THE MODERN
WAY**

**... WITH A
GOLDAK
METAL
LOCATOR**

You have heard the many stories of buried
treasures, lost mines, and ghost towns through-
out the west: the lost Sublett mine near Carls-
bad Caverns, the lost Dutchman mine, Super-
stition Mountain, and many more. Using the
right kind of modern equipment, treasure hunt-
ing can be fun and exciting.

Your next trip to the desert can be excitingly
different if you take along a GOLDAK metal
locator. Using the latest electronic principles, a
GOLDAK locator can detect metals up to 27
feet below the surface of the ground.

5 models include, transistorized instruments,
underwater metal detectors, geiger and scintil-
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Immediate Delivery — Prepaid

Pendant Mount 18x25—Lacy Filigree,
Gold Plate 30c ea., \$1.65 six, \$3.00 doz.
Rhodium Plate 35c ea., \$1.85 six, \$3.35 doz.
Heart & Link Chain. New Heart cement on disc
Gold Plate 10 feet for \$2.50
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Pierced Earwire with Loop
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30 to 90 days in jail are penalties for violations. Imitations are defined by the statute as "Indian" goods made by machine; made wholly or partly of artificial or synthetic material; or not made by Indian workmanship.

A permanent 1200-acre recreation lake in White Rock Canyon, 25 miles southwest of Santa Fe, is in the offing. Officials from four counties in the area want to convert the proposed Cochiti flood and sediment control project on the Rio Grande into a recreation facility.

Santa Fe Lake

Stanford University's request for \$200,000,000 in Federal funds for construction of a two-mile straight tunnel into the Coast Range back of the school brought a question from northwest Nevada, home of Sutro Tunnel: "What's wrong with our hole in the mountain?" Stanford wants a tunnel for advanced experimentation in electronics and nucleonics. The Sutro Tunnel, one of the great engineering feats of the 19th Century, is straight and almost four miles long. It was constructed as a practical means of draining water from the Comstock mines. When it cut the Lode at the 1750-foot depth in 1878, the mine workings—and the water level—were already at a lower level.

Nevada's two senators are spearheading an effort to get the U.S. into the world solar energy race. Alan Bible and Howard Cannon, whose joint claim that Nevada is among the "top three sunshine states" is not likely to be challenged, said the development of solar energy offers tremendous potential for the future development of the Sagebrush State. Senators Bible and Cannon propose that the U.S. spend \$1 million as a start on solar energy research, a sum they describe as "infinitesimal when com-

Harness The Sun

pared with expenditures made in the development of other natural resources."

After a river-running season marred by mishap and misjudgment (climaxed by a California party of 16 "amateurs" running Cataract Canyon without a guide and becoming the object of a highly publicized search when two frightened crewmembers jumped ship

and were later spotted from the air), Chet Olsen, director of the Utah State Parks and Recreation Commission, proposed establishment of controls over the canyoneering hobby. "Rescue operations are costly and dangerous," Olsen pointed out. "We want people to use the rivers, but we want them to do it safely." The "rescue" of the California party cost \$10,000. The "rescued" Californians said the search excitement was "sort of ridiculous."

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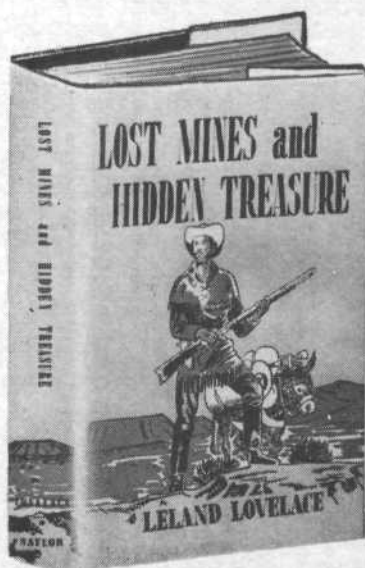


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"Say, mister," Shorty said, "pardon th' nosyness, but what in tarnation is all thet noise comin' outa thet radio?"

The stranger looked surprised. "Why, that's a football game. The season started this month, you know."

Shorty said not a word. Finally the stranger spoke again: "You do know what football is, don't you?"

"Oh, sure," answered Shorty. "Thet's thet rough game th' young teacher from the state college waz tryin' to learn th' miners' kids over to Shoshone."

"Did they learn the game?" asked the stranger.

"Nope," answered Shorty. "Thet teacher tole 'em everythin' they waz supposed t' do an' jest 'fore th' first game started he tole them thet if they couldn't kick the ball they waz supposed to kick a man on th' other side — anythin' ta win. Then he yelled fer th' ball, but the kids yelled back: 'Ta hell with th' ball—let's get started.'"

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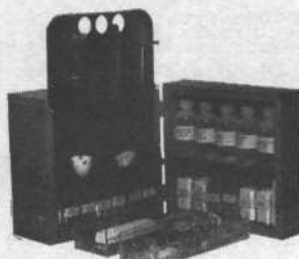
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IMAGE OF A CITY THROUGH ITS PRESS CLIPPINGS

The book bears the title: *Santa Fe, The Autobiography of a Southwestern Town*. Actually, it more accurately should be called: *Random Clippings from the Santa Fe New Mexican Newspaper*.

Edited by Oliver La Farge, the volume is a series of quotations, arranged in chronological order from 1849 to 1953. These items are from the *New Mexican*, which has been published intermittently for 110 years in Santa Fe.

If the clippings gathered in La Farge's Santa Fe are true color bearers for that historic town, then it has indeed led a haphazard, and unusually ordinary existence—at least for the last 110 years.

Printed by the University of Oklahoma Press, the 440-page book gives half of its attention to the period from 1849 to 1912, and the last half to the 40 years from 1913 to 1953. This volume, with 17 halftone illustrations, is priced at \$5.95.

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George Curry of New Mexico was born in Civil War days (1861), died in the Atomic Age (1947). He was, in the broad view of history, a "minor official" — county sheriff, territorial legislator and governor, officer in Teddy Roosevelt's Rough Riders, Manila (P.I.) chief of police, congressman.

It was his association with Roosevelt that opened the door to his higher-level positions. Indeed, from what Curry recounts in his autobiography, the best recommendation for an ambitious Southwesterner in those days was to have served under Roosevelt. The author, a "member of the team" to the end, never insinuates that there might have been a better yardstick for judging men.

Curry's contacts during the heyday of his life—from Billy the Kid and Pat Garrett to John Nance Garner and Dennis Chavez—read like a Who's Who of an earlier America. The pity of Curry's autobiography is that its author was a far better public official than he was writer. His life's account is almost entirely one-dimensional, rarely two, never three. In writing about his life, he rigidly stuck to the public side of it. We get little insight

into Curry the inner man as he reacts to and reflects upon the vast changes that take place in Southwestern America during the remarkable era in which he lived. What could have been a significant contribution to Southwestern literature turns out to be just another biography.

George Curry, 1861 - 1947, An Autobiography, was edited by Horace B. Hening; published by University of New Mexico Press; 336 pages; index; halftone plates; color portrait of Curry and sketches by Sam Smith; \$6.50.



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MORE CLASSIFIEDS ON NEXT PAGE

TRADING POST --- (Continued)

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* * *

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"ROCKHOUND TRAILS" Gem Show will be held at Simms Park, Auditorium, 16624 South Clark Avenue, Bellflower, California, September 26 and 27. Doors open 10:00 a.m., close Saturday 10:00 p.m. and 8:00 p.m. Sunday. Admission Free.

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DESERT PRIMER: Southwestern Names

PROPER PRONUNCIATION of Southwestern names of Spanish and Indian origin is an imposing bugaboo to many "outsiders." It need not be—if you keep your ears perked. When that southwestern Arizona service station attendant starts talking about "HEE-la this" and "HEE-la that," you'll soon realize (upon consulting your road map) that he is referring to Gila—a very popular place name in his territory.

The basic Spanish grammatical rules apply in most cases, of course, but the main pronunciation danger (to tourists) usually comes in not knowing the right syllable in a word to accentuate. Take Acoma (New Mexico's "sky city") for example. Accent is on the first *a*—AK-ah-mah. Your Santa Fe gasoline vendor probably will scratch his head if you ask him directions to *ah-Co-mah*.

J in Spanish is pronounced *h*. Jemez, another New Mexico pueblo,

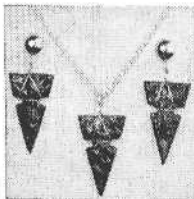
comes out *HEH-mez*. The *ll* in Spanish is a very special hispanic sound—a sort of tongue-sliding-off-teeth *lyah*. Thus Llanero becomes *yah-NAY-ro*; Jicarilla is *hee-kah-REEL-yah*. Of course the *yah-NAY-ro* and *hee-kah-REEL-yah* are Apaches, subdivisions of the Querecho (*ka-RAY-cho*) buffalo hunters. Blood brothers are the Faraon (*faw-raw-OWN*), Lipan (*le-PAHN*) and Mescalero (*mes-kaw-LAY-ro*) Apaches.

It's easy to move happily through the botanical word jungle when you soften *sag-AIR-oh* (saguaro) to *sa-WA-ro*. Cholla is *CHO-ya*; bisnaga, the barrel cactus, is *bis-NAW-ga*; ocotillo: *o-ko-TEE-yo*; jojoba: *ho-HO-bah*.

Casa ("house") is pronounced *KA-sah*; agua ("water") is *AH-wah*.

While English-speaking tourists may do their share of corrupting the Southwest idiom, the early Spaniards had their moments, too. The Navajos refer to a certain beautiful and steep-walled canyon in the heart of their reservation as "Tsegi." Early Spaniards twisted this to *day-shay-ye*. Along came the anglicized version, and today Canyon de Chelly is pronounced *day-shay* or *d'shay*.—END

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As a Park Service ranger stationed at Casa Grande National Monument, Donald P. Jewell ("Frank Pinkley: 'The Boss'") heard a lot about Frank Pinkley. "I had an opportunity to separate fact from legend, and I've long wanted to share what I learned about Pinkley," he writes.

Jewell left the Park Service several years ago in favor of a career in teaching anthropology and archeology at American River Junior College in Sacramento, Calif.

QUIZ ANSWERS

Questions are on page 24

1. False. Goldwater is U.S. Senator from Arizona.
2. True. 3. True.
4. False. Bone, charred wood, native copper and other materials were used for arrowheads.
5. True.
6. False. California-Nevada line.
7. True. 8. True.
9. False. "Desert varnish" is a shiny coating found on some rocks.
10. True.
11. False. Cooke was the military commander of the Mormon Battalion.
12. False. The Yaquis have a vigorous culture.
13. True. 14. True. 15. True.
16. True. 17. True. 18. True.
19. False. Indians were using turquoise before the coming of the Spaniards.
20. False. San Xavier is located near Tucson.

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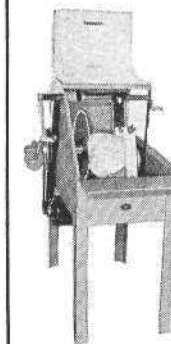
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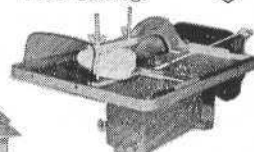
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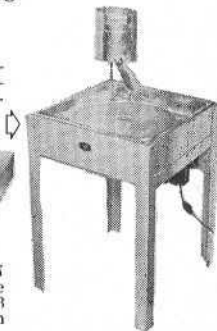
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By RANDALL HENDERSON

RECENTLY THE FATHER of a teenage boy asked me what I would suggest in the way of recreational opportunities for a son who loves the outdoors—as most young people do—and would like to spend his spare time at some pastime more adventurous than watching television or going to the movies.

"He is an active boy, at an age when every normal lad wants to test his muscles and his courage," the father said to me, "and I am convinced that much of the delinquency of youth is due to the failure of our civilization to provide a healthful outlet for the energies and aspirations of these youngsters."

Many years ago I had the same problem in my own family. Fortunately, the days of my own youth were still clear enough in memory that I knew the yearning in the heart of my son. I found the solution by joining the Sierra Club of California and making it possible for my son to spend as many of his week ends as possible camping, hiking and climbing with the members of California's great conservation group—which was founded many years ago by the great naturalist John Muir.

In more recent years some of the Sierrans in the Angeles Chapter (Los Angeles) have formed a special climbing group—the Desert Peaks Section—whose goal is to climb as many as possible of the hundreds of mountain peaks which rise above the valleys and plateaus of the Desert Southwest.

"That is the formula I would recommend to you," I said to the father. "Join the Sierra Club, and make it possible for your son to go on as many of the outings as possible. If you can accompany the Sierra mountaineers on their climbing expeditions so much the better. But if that is not possible, you can have the satisfaction of knowing your son is in the company of clean, wholesome companions. There are no finer people on earth."

Although I am growing too old for the steeper trails, I still think mountain climbing is the most exhilarating recreation in the outdoors. Civilization in its frantic quest for new resources to exploit, has so far found most of the desert peaks too inaccessible or too barren to yield a profit. And may this always be true! May these high oases of the desert land—for there generally is a luxuriant growth of timber and vegetation on the upper slopes—be reserved always for you and me and those other Nature-loving humans who seek not their profit in the whirl of wheels or the clang of steel, but in the beauty and peace and spiritual lift of those remote high places known only to sturdy souls who climb mountains for the pure joy of climbing mountains.

* * *

This month I added to my library a fascinating new book, *The Sheltering Desert*, which is a revealing narrative of life in one of the most pitiless regions on earth—the Kalahari Desert of southwestern Africa. The story is

the day by day experience of two German geologists who, determined to have no part in Hitler's war, went into voluntary exile in a remote sector of a land so hostile it was seldom visited even by the native Bushmen.

For two and one-half years their only contacts were with the gazelles, zebras, ostriches, baboons, hyenas, leopards and jackals which came to the waterholes where they drank together in sort of an armed truce. Life for both men and the wild beasts was a bitter never-ending struggle for survival—and generally there were vultures circling overhead to share, if possible, in the spoils of the warfare between the predators on the hot sands below.

Being scientists, the exiles spent many of their evenings discussing the meaning and evolution of life—all life on this planet. In the end, their conclusions were much the same as quoted on this page last month—that while struggle and competition are necessary under primitive conditions, the ultimate end of competition, unleavened with altruism, is war and extinction. Hence mankind will survive and triumph over his environment only if human beings strive to attain the higher level of understanding expressed in love and cooperation. Henno Martin, author of the book, wrote:

"In a hostile environment development is impossible without struggle, but if natural selection in that struggle were the only active force how could there have been any striving toward beauty, friendship and peace? And yet this striving, which cannot be reconciled with the (Darwinian) laws governing the struggle for survival, exists even in the animal world."

* * *

Those of use who live on the desert are following with great interest the progress of science in perfecting economical processes for the conversion of sea water for domestic and farm use. For water always is the limiting factor in making the desert habitable for human beings.

At the present time it does not appear feasible to bring water from the Pacific Ocean or the Gulf of California for the irrigation of desert lands. But the men of knowledge tell us the time will come when we will be extracting our metals from common rock—and perhaps by that time they will have found a way to grow cotton in Arizona with water from the Gulf. In any event, great benefits will result to Utah, Nevada, Arizona and the desert sector of California if at some future time the coastal communities of Southern California find it more economical to convert sea water than to take their supply from the Colorado River.

Latest report is that within the last eight years the cost of desalting sea water has been reduced from \$5.00 to \$1.00 per thousand gallons. That is encouraging progress, and Congress recently has authorized five new pilot plants for continued research in the desalting process.



Old Pinyon

LUCILLE DIMENT CAMPBELL
Lakeside, Calif.

Like an aged father the pinyon stands,
Gnarled and stooped, guarding the sands.
Old pinyon, old pinyon! If you could but speak,
I'd hear you out 'til your voice grew weak!

The fragment of pottery, with a fingerprint there—
Did the one who made it have thick, black hair?
Was she the mother of a small, brown boy?
Or was she a sweetheart, slender and coy?

In the nearby cave that the sunset turns red,
Who left the ashes, long since dead?
Were there old grandparents, wrinkled and dear?
Where did they go? Are they buried near?

Old pinyon, old pinyon! If you could but speak,
I'd listen to you 'til your voice grew weak!
But bent and beaten you mutely stand,
Guarding the secrets of this silent land.

POEM OF THE MONTH

*"Storm over
Navajo Mountain
in Northern Arizona"*

Photograph by
HULBERT BURROUGHS



Pelican Island

(See story on page 4) On the ground the pelicans of Utah's Great Salt Lake are ungainly, aloft they are beauty in motion. Photo by J. Flannery, Centerville, Utah.