

DESERT

FEBRUARY, 1973 50c

ICD. 08256



ANOTHER UNBELIEVABLE FIRST FOR D-TEX

ALL NEW D-TEX "COINSHOOTER"

Positively Differentiates Between Trash and Treasure.



Bill and Lorraine Kueter with 6 of their 8 children test the new D-TEX "COINSHOOTER". Coin hunting is their specialty with over 13,000 coins plus numerous rings and other jewelry found in the last 15 months. They are members of The Prospector Club of Southern California. Camping and coin shooting is the family hobby. After testing, Bill says the "COINSHOOTER" is the detector for him.

A VACATION THAT PAYS – THE D-TEX WAY

★ IN FAMILY TOGETHERNESS ★ IN FUN FOR EVERY MEMBER OF THE FAMILY ★ IN CASH MONEY IN THE FORM OF OLD VALUABLE COINS, RINGS & JEWELRY ★ IN MORE GOOD FINDS IN LESS TIME – ELIMINATES UNNECESSARY DIGGING ★ WITH THE ALL NEW D-TEX "COINSHOOTER" YOU MAY SEARCH THE AREAS WHERE OTHER DETECTORS GIVE UP ★ TAKES THE FRUSTRATION OUT OF COIN SHOOTING ★ THE ONLY DETECTOR THAT POSITIVELY DIFFERENTIATES BETWEEN TRASH AND TREASURE.

FAR EXCEEDS ALL OTHER MAKES OF DIFFERENTIAL AND ANALYTICAL TYPE DETECTORS.

REJECTS: Bottle caps, foil, nails and other ferrous and non-ferrous trash.

DETECTS: Silver, gold or copper coins, gold rings and other jewelry.

LOGICAL SPOTS: School yards, old churches, playgrounds, swimming beaches, old picnic areas, carnival sites, old houses. Even the recreation vehicle camp grounds. Around each camp area and the playground.

REMEMBER – EVERY PLACE PEOPLE HAVE BEEN, COINS AND JEWELRY HAVE BEEN LOST.

The Coinshooter is made in two models, "COINSHOOTER I" and COINSHOOTER II". Both models reject sea water and may be used on the beach with no interference from the water. Easily detects gold and silver doubloons and pieces of eight in the sand and under sea water. The most efficient detector for beach combing at any price.

Write Today

for our folder on the "Coinshooter" or our catalog of all D-Tex units with folder included.

THE FIRST REALLY NEW TREASURE LOCATOR IN 30 YEARS!

P. O. BOX 451 F-9

D-TEX ELECTRONICS

Garland, Texas 75040

614 EASY ST. – PH. 272-2622

WILLIAM KNYVETT, PUBLISHER
JACK PEPPER, EDITOR

GEORGE BRAGA, *Art Director*

MARY FRANCES STRONG, *Field Trip Editor*

ENID C. HOWARD, *Utah Associate Editor*

GLENN VARGAS, *Lapidary Editor*

K. L. BOYNTON, *Naturalist*

MARVEL BARRETT, *Circulation Manager*



Volume 36, Number 2 FEBRUARY, 1973

CONTENTS

FEATURES

WEEP FOR WEEPAH	8	<i>Mary Frances Strong</i>
TREASURES IN THE TURTLES	12	<i>Jack Pepper</i>
DESERT LOVE STORY	18	<i>Ernie Cowan</i>
THE CASE OF THE YALLER JACKPOT	20	<i>Ken Marquiss</i>
COACHELLA VALLEY MAP	26	<i>Roger Dean</i>
LAND OF CONTRASTS	28	<i>Jack Pepper</i>
CHANNELS THAT CHANGE	32	<i>Al Pearce</i>
ANTELOPE GROUND SQUIRREL	34	<i>Jack C. Turner, Jr.</i>
THE GHOSTS OF TULE HOLES	36	<i>Roberta Starry</i>
RECIPES FOR M'LADY	41	<i>Helen M. Peterson</i>

DEPARTMENTS

A PEEK IN THE PUBLISHER'S POKE	4	<i>William Knyvett</i>
BOOK REVIEWS	5	<i>Jack Pepper</i>
DESERT LIFE	25	<i>Hans Baerwald</i>
RAMBLING ON ROCKS	46	<i>Glenn and Martha Vargas</i>
CALENDAR OF EVENTS	50	<i>Club Activities</i>
LETTERS TO THE EDITOR	50	<i>Readers' Comments</i>



THE COVER:

California's Riverside County is a "Land of Contrasts" which offers many scenic areas and palm oases where Desert Lovers can find peace and solitude under the blue skies. Photo by Jack Pepper.

EDITORIAL, CIRCULATION AND ADVERTISING OFFICES: 74-109 Larrea St., Palm Desert, California 92260. Telephone Area Code 714 346-8144. Listed in Standard Rate and Data. SUBSCRIPTION RATES: United States, Canada and Mexico; 1 year, \$5.00; 2 years, \$9.50; 3 years \$13.00. Other foreign subscribers add \$1.00 U.S. currency for each year. See Subscription Order Form in this issue. Allow five weeks for change of address and send both new and old addresses with zip codes. DESERT Magazine is published monthly. Second class postage paid at Palm Desert, California and at additional mailing offices under Act of March 3, 1879. Contents copyrighted 1973 by DESERT Magazine and permission to reproduce any or all contents must be secured in writing. Unsolicited manuscripts and photographs WILL NOT BE RETURNED unless accompanied by a self-addressed and stamped envelope.

P.D.Q.

THE MOST VERSATILE UNIT
ON THE MARKET TODAY!

DIAMOND DRILL POINTS

Good drill points are necessary with any drill press. Two styles are listed below. The solid style has a drilling point composed of a special alloy and diamond bort. This type of drill is delicate and needs care in its use. However, with care, the solid type is much longer lived and will drill more holes per dollar. The hollow core style drill has a hollow steel tip which is coated with diamonds by a special process. This style drill, drills very fast and is less delicate and can be used by the beginner with good success. We do recommend this type drill for beginners and for extra fast drilling in Opal, Obsidian, etc.

The New "WHIZ-Z-Z Sintered Diamond Drills

No.	Point Size	Shank Size	Price Each
89	1.00 mm	1.00 mm	\$5.50
90	1.50 mm	1.50 mm	5.00
91	2.00 mm	2.00 mm	5.50
92	2.50 mm	3/16 inch	6.00
93	3.00 mm	3/16 inch	7.00
94	3.50 mm	1/8 inch	8.00
95	4.00 mm	1/8 inch	9.00

Prices on request for larger drills
up to 8 mm

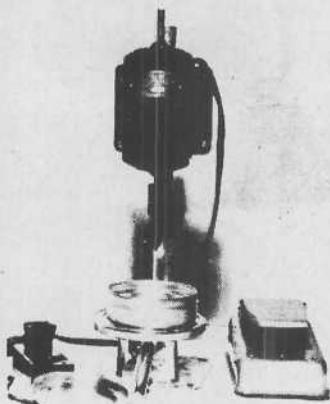
Metro Diamond Drill Vitromet Bonded Diamond Drills

Here are the handiest Vitromet Bonded Diamond Tools developed for the Jewelry and Lapidary Craftsman for drilling, reaming and beveling Gemstones.

Drills With 3/32" Shank

No. 8	1 mm (3/16" diamond depth)	\$7.50
No. 9	1 1/4 mm (3/16" diamond depth)	\$7.00
No. 10	1 1/2 mm	\$6.50

No. 11	2 mm	\$7.00
No. 13	2 1/2 mm	\$8.00
No. 6	3 mm	\$9.50
No. 7	3 1/2 mm	\$11.50
No. 5	4 mm	\$14.00



AS A DRILL

Basic unit. Drills clean holes faster. Comes with motor, chuck, foot rheostat, drill pan and drilling template. Booklet of operating instructions included.
Nickle Plated \$42.50

(Does not include price of diamond drill point.)

Be sure to include sufficient postage—
any overpayment will be refunded

SHIPLEY'S MINERAL HOUSE

On Hwy. 160 in southwest Colorado, 18 miles east of Durango or 1 1/2 miles west of Bayfield.

Mailing Address:

SHIPLEY'S MINERAL HOUSE, Gem Village,
Bayfield D, Colorado 81122
Phone: 303-884-2632

SEND FOR NEW CATALOG No. 9-B

LOTTIE M. SHIPLEY



A Peek in the Publisher's Poke

THE FEBRUARY ISSUE brings you another Southern California special featuring a search for various types of treasure in the Turtle Mountains with Jack Pepper; Ernie Cowan, a regular *Desert* contributor, tells about one of his favorite desert spots, the Carrizo Badlands; Roger Dean, a Palm Desert commercial artist, offers an unusual four-color map of the Coachella Valley with an aerial-view type format; Jack changes from treasure to travel, to back up Roger's presentation and has compiled a guide of interesting places to see and things to do while in the area.

Al Pearce points out the tremendous importance of water to the inland empire and just how the barren desert lands have been transformed by the use of irrigation canals and reservoirs.

Upcoming in the March issue an old favorite, Ken Marquiss, takes a different tack from his usual treasure-hunting episodes and tells about a great area for gathering garnets. Mary Frances Strong, who regularly has gem and mineral field trips, takes a turn at telling us about a recreational area in the Mojave Desert.

A new face in *Desert*, Robert Cronin, tells of the trials and tribulations in taking a mule ride down into the Grand Canyon.

In short, our same familiar format, with something for everyone.

FIND BURIED TREASURE

Locates buried gold, silver, coins, jewelry, old weapons. Works through earth, vegetation, water, wood, etc.

Write for free catalog and fascinating treasure booklet.
Financing available.

5 powerful models

New Relco detectors send electronic beam far into earth to seek out treasures lost or hidden throughout the centuries. Signals when object is detected. Most powerful made.

RELCO, Dept. D-318 Box 10839, Houston, Tex. 77018



1995
to 19850

TRAVELEZE
it goes without saying...

If you like easy traveling, anywhere your heart desires, plus unequaled comfort and convenience when you want a hot meal, or just some refreshment and relaxation... then you'll love a TRAVELEZE.

Beautiful interiors, spacious kitchens and baths, comfortable beds, sturdy construction... a TRAVELEZE is easy to own and easy to love.

Look into a TRAVELEZE travel trailer, motorhome, or camper. Your TRAVELEZE dealer will show you how easy it is to travel in style and comfort... anywhere... anytime. If you don't know who he is, write to us for his name and free, full-color literature.

We've spent the last 41 years engineering your next TRAVELEZE. You're going to love it... it goes without saying.

For Canadian dealer information contact
Hastings Trailer Sales Ltd., Burnaby 1, B.C.

Dedicated to Quality Since 1931
TRAVELEZE
DIVISION OF TRAVELEZE INDUSTRIES, INC.

11473 PENROSE STREET
SUN VALLEY, CALIFORNIA 91352

Book Reviews

by Jack Pepper

All books reviewed are available through
Desert Magazine Book Shop

THE CAHUILLA INDIANS

By
Lucile
Hooper



Recently a visitor from New York stopped by *Desert Magazine* and asked if "there are any American Indians in this area?" Realizing he was sincere, we informed him there were Indians in Riverside County and that the phrase "American Indian" is redundant in that Indians lived in the Western Hemisphere long before the word "America" was created.

During our discussion it was brought out that Indians throughout the Western Hemisphere are not homogeneous and that their customs, myths and way of life vary from east to west as much as those of the white man who lives in rural and urban areas and is influenced by climate, economy and his own heritage. The Indian tribes of the North American Continent are as different as the Italian, Polish, Jewish, English, Negro, or other ethnic groups in America.

Which brings us back to California and Riverside County where one of the largest surviving Indian tribes of Southern California not only flourishes, but is part of the social and economic phases of the communities of Coachella Valley.

Although, compared to the Navajos, Hopis, and other larger tribes of the West, the Cahuillas are comparatively small, they have played an important part in the history of Southern California. There are three groups which occupy three contiguous but different habitats; the Mountain Cahuillas which live above the 4,000-foot level in the Santa Rosa Mountains; the Pass Cahuilla which live mostly on the Morongo Reservation in the San Gor-

wilderness pines

SAN JACINTO MOUNTAINS • IDYLLWILD, CALIFORNIA



A Complete Campground for Recreation Vehicles



Relax in a 190 acre park adjacent to 246,000 acre wilderness preserve

250 shady sites at 6500 ft. elevation among the tall pines of the San Jacinto Mountains of Southern California

Stable your own horses or use ours on miles of safe trails; rodeo arena

Fish in our private ponds or in nearby Lake Hemet and Fulmor

Enjoy our swimming pool, playgrounds, hiking trails

Electric & water hook-up ■ Rest rooms ■ Hot showers ■ Laundry ■ Ice Dump station

Reservations accepted. For free brochure write or call: *Wilderness Pines*, P.O. Box 2265, Idyllwild, California 92349 ■ Ph. 714/659-2123

■ From U.S. 395 take State Hwy. 74 thru Hemet to Mt. Center; north 3 miles, past Idyllwild to entrance sign.

From Intst. 10 take Idyllwild turn-off in Banning; 22 miles to Pine Cove, to entrance sign.



LIMITED PRINTING!

Desert Editor

the story of Randall Henderson and Palm Desert

by J. Wilson McKenney

Desert Editor . . . the story of Randall Henderson and Palm Desert is a story of a man who fulfilled a dream and who greatly enriched the lives of the people who love the West.

Hardcover,
illustrated
with 188 pages.

\$795

Postpaid

California residents please add 40 cents



Send check or money order to:

Desert
Magazine Book Shop

BOX 1318 PALM, DESERT,
CALIFORNIA 92260

your metal locator is obsolete!

PRECISION'S MARK-5 MAKES IT SO;

Now Precision gives you the better locator to do the jobs demanded by today's sophisticated prospector and treasure hunter.

Heres why it's better.

- Truetone loudspeaker.
- Sensitive indicating meter.
- 7" search loop.
- Battery tester.
- Ground control.
- T-R circuit.



- Metal-Mineral control.
- Telescoping shaft.
- Space age headphones
- Vernier tuning.
- 2 year guarantee.

New ultra scan waterproof search loop with up to 4-times as much coverage as other T-R's. Complete with Precisions geo-balance control, for working in highly mineralized ground, salt water, wet grass, etc.

Order now ... or send for more information.

\$129⁵⁰

General Electronic Detection Co.
16238 Lakewood Boulevard
BELLFLOWER, CALIFORNIA 90706

gonio Pass; and the Desert Cahuilla who reside and own land around Palm Springs and in the Coachella Valley.

Like other Indian cultures whose modern-day members are adapting to our present-day civilization, the legends, myths, and beautiful poetry of their ancestors which tell of the creation of the Indians and the world are being lost in the maelstrom of today's literary and "on-the-scene" television accounts of violence and protest movements.

To truly understand the culture of any civilization—whether it be Roman, English, American or Indian—one must know the people and their beliefs. Lucile Hooper gives such an insight into the Desert Cahuillas in her presentation which was first published in 1920 by the University of California Publications in American Archaeology and Ethnology. Now again in print, it will help the white man understand and appreciate the culture of the Cahuilla Indians of Southern California. Paperback, large format, bibliography, 65 pages, \$2.50.

THEY FOUND GOLD

By
A. Hyatt Verrill



When the word "treasure" is mentioned to Western hunters, we think of lost mines, placer diggings, Spanish gold, buried bank robbery loot or lost missions.

But treasure hunting is not restricted to the West. It is a worldwide avocation and many hundreds of thousands of dollars have been spent by men seeking these elusive treasures both on land and under the oceans.

It can be either a hobby or a business—and it can meet with both success and failure. This is brought out in A. Hyatt Verrill's book which he subtitles, "The Story of Successful Treasure Hunts."

First published in 1936 and out-of-print for many years, it is once again available in its original text with an updated Publisher's Preface and Introduction by veteran treasure hunter Karl von Mueller.

This book does not contain waybills to lost treasures of the West. It is a fascinat-

ating account of sunken ships and millions of dollars in gold and silver and of buried treasures on lonely tropical islands put there by pirates who once roamed the seas unmolested.

A professional scientist and avocational treasure hunter, the author was a member of professional ethnological expeditions between 1920 and 1953. During 1933 and 1934, he was the organizer of the expedition on which this book is based—an effort to locate and salvage sunken treasure ships off the coast of Yucatan and Central America. He also went on extensive explorations in Bermuda, West Indies, Central America, and Panama, writing 105 books on natural history, treasure hunting, and travel. He died in 1954.

He was not only an archeologist and treasure hunter, but an excellent writer. In reading his chapters about the buccaneers of the 17th and 18th centuries, one feels he is with the blood-thirsty pirates as they scuttle ships and then, because they had so much loot they could not haul more aboard, buried their booty on lonely islands. Some returned and retrieved the treasures, others were killed and their buried loot still remains—a challenge to modern day treasure hunters.

Equally fascinating are his first-person accounts of his expeditions to salvage the treasures from sunken ships—of the frustrations, dangers and the thrill of finding the ships and bringing up the coral-encrusted hardware and the gold and silver.

Although he states that most people who find treasures do not report the finds—and he agrees with them—some have and he tells of their successful searches.

"Treasure hunting, whether on land or under the sea, is not a poor man's game. In fact, it is not a game for anyone unless he or they look upon it as a game, an out-and-out gamble, and enter into it for the adventure, the thrill, and the fun to be had for the investment," he warns.

Whether you are poor or rich, a treasure hunter or an armchair reader, you will find *The Found Gold* will take you into a world of adventure and back to the days when the buccaneers ruled the seas. Hardcover, illustrated, 267 pages, \$7.50.

Books reviewed may be ordered from the DESERT Magazine Book Order Department, Palm Desert, California 92260. California residents please add 5% sales tax.

Did you know Highway 111 Has a New Name?

PALM SPRINGS

Not really — but we call it

“The Santa Fe Trail”

Because there are three Santa Fe offices to serve you.
All located on Highway 111!

And every office features **FREE** safe deposit boxes*
FREE travelers checks and money orders to savings customers,
FREE collection service*, **FREE** Transmatic service,
FREE identification medallions and key rings,
and many other FREE services and benefits . . .

*For customers with \$1,000 or more deposit;
Palm Desert office now taking box reservations



TOM HOGAN



300 S. PALM CANYON DR.

PALM DESERT



JOHN HERSHISER



PALMS TO PINES PLAZA
HIGHWAY 111 by UCB

HIGHWAY 111
“THE SANTA FE TRAIL”

INDIO



DICK VOCE



HIGHWAY 111 AT MONROE
INDIO PLAZA



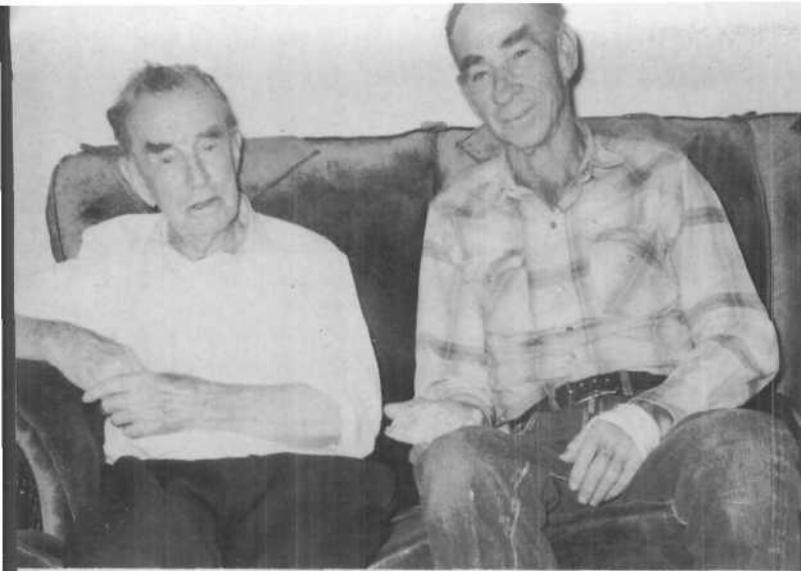
on the Desert



Santa Fe Federal Savings
AND LOAN ASSOCIATION

CHARTERED 1890

OFFICES ALSO IN SAN BERNARDINO • VICTORVILLE • YUCAIPA AND SOON IN DEL MAR



Fred Steen and Ernie Stockwell (left) discuss the day when Ernie, right, found three pounds of gold nuggets! Weepah as it looked (below) in 1927, just 11 days after the original gold discovery. Historic Photo courtesy Gerald Roberts, Tonopah Times.

WEEP FOR WEEPAH



by
Mary
Frances
Strong

Photos
by
Jerry
Strong

IT WAS early in March, 1927, when a teenage boy discovered the "pot-of-gold" which rocked the mining world and caused a wild stampede unequalled in modern Nevada history. Immediately after young Leonard Traynor and his partner, Frank Horton Jr., placed their ore in the hands of an assayer and his report disclosed it ran \$78,000 to the ton—the boom was on!

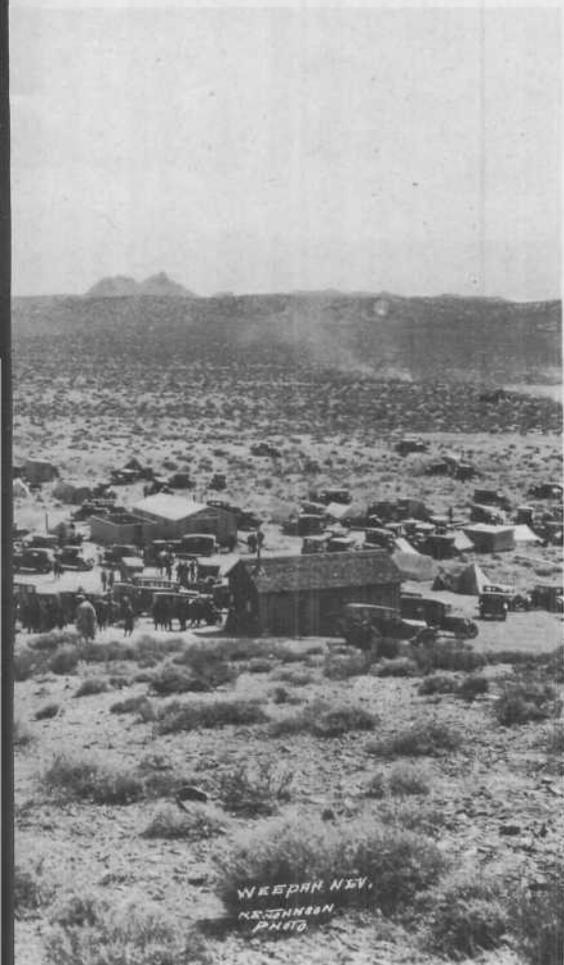
"Boys Hold Secret of Great Wealth — Greatest Strike in History — Gold All Over The Ground" screamed newspaper headlines, which were picked up and carried in papers around the world. The nature of the discovery, embellished by the press, stirred the emotions and captured the public's interest.

This was a flamboyant time in our country's history — the apex of the "Roaring Twenties." Within 24 hours,

hundreds of goldseekers, experienced and neophyte, had loaded their autos with pick, shovel, tent and grub box to head for Tonopah — even though the site of the strike was a closely guarded secret. Oh yes, they had also included gunny sacks as repositories for the golden treasure they would pick up from the ground!

Though under heavy pressure from the public and press, the boys showed considerable maturity by remaining silent as to the location of the strike until the senior Horton — a mining man — could return from California. The only statement they made was, "No, it is not on virgin ground. Our strike is in an old district."

Tonopah literally quivered with excitement. Heavily loaded touring cars, trucks and flivvers lined the main street waiting to rush to the golden grounds as soon as the location was disclosed. Speculation ran rampant.



Although most of Weepah's dwellings were temporary, a few (above) are still standing. Jerry Strong (below) investigates what is reportedly the original discovery hole. He failed to find any gold.

The boys' movements, prior to the strike, were tracked down in a manner rivaling a super sleuth on a murder case. The first clue came when it was learned the boys had stopped at Alkali Springs on their way back to Tonopah. A mining scout deduced they might have been in the Weepah District and he hastily headed for the hills.

Investigating one of the claims, he found "fresh tracks" in the blacksmith shop and noted a shallow cut nearby which appeared to have been recently covered. Then, upon examining particles left in a recently used mortar—he found gold dust. He had reckoned properly—here was the golden ground!

When this news circulated the rush began. The following day, some 200 men and four women poured into the Weepah District. Traffic through the hills was almost bumper to bumper. There was a



notable absence of the prospector's mule and burro, since the auto had come into its "hey day" as the ultimate in transportation vehicles. It was an exciting trip over bouncing, rutted roads leading to the Utopia of men's dreams—a golden treasure for the taking.

Hot on the tracks of the goldseekers were the promoters, merchants, gamblers and prostitutes. Weepah's population soared to 500 in two weeks and continued to climb rapidly. It was an instant city of tents with boards between boxes serving as counters for shop keepers displaying their wares. All types of general merchandise were available along with "hot dog" stands and saloons. Gasoline was dispensed in three-gallon lots and water was reportedly dearer than booze.

The *Tonopah Daily Times* continued to cover the excitement at Weepah. The March 6, 1927 issue carried the following statement by Gilbert Anderson, Tonopah Mine employee who had gone through the Goldfield rush. "I saw a ledge about 18 inches wide with a 4-inch core of almost pure gold."

At Weepah, the entire area for miles around was a forest of claim stakes—but

still they came. Easter Sunday found Weepah accepting the homage of an enthralled citizenry from Tonopah and Goldfield. Scores of cars paraded by the discovery site where Frank Horton Sr., his son and Leonard Traynor held court and dispensed gold-ore samples to their admirers.

A few days later, the Pathe Newsreel crew arrived and took films of the discovery picking up handfuls of soil containing \$6.00 in gold. The showing of the film added fire to the already mounting excitement over the new strike. People from all over the country began to make plans to go to Weepah. The Miami, Florida Auto Club received so many requests on how to reach the strike that they mimeographed maps showing the best cross-country route to Weepah.

It soon became necessary to place an armed guard at the discovery site. Ed Benone, founder of the Jarbridge Gold camp, accepted this responsibility. The hundreds of curious visitors would no longer be permitted to scoop up gold samples.

The serious work of developing the mines was soon underway. Townsite leases were made available at \$150 to \$250 per lot for possessory rights. This gave the occupants protection for their rights which could be sold or traded, if desired.

With reportedly over 2,000 people at Weepah, permanent buildings began to appear. The pace was frantic. A large gambling house was completed in four hours by 19 carpenters! The Gold Nugget Club was built by three men in about eight hours. Wm. J. Tobin, Pioneer Mine manager, forecast "1,000 homes in six months." A daily stage line ran between Tonopah and Weepah and a newspaper was soon scheduled to start publishing.

Lead sulphides showing gold and silver were found during exploratory work at the Electric Mine and, 12 days later, the news all Weepah had been waiting for was announced. A 10-inch vein of quartz had been cut on the Electric Lease exposing a ledge for a length of four feet. Free gold was visible to the naked eye! On May 12th the *Tonopah Daily Times* proclaimed "Weepah discovery vein traced for 61 feet on the Sellers Lease. Ore was found worth \$150,000 per ton making this the most eventful day in the Weepah District."

The camp went crazy upon receiving the good news. A wild night of celebra-



tion followed during which speculators "invested heavily" in the prospects of the leases making good. Claims changed hands as often as the wind changed direction.

Two weeks later, the first Weepah ore was shipped, though not from the discovery site. Driver Jack Belmont delivered 31½ tons from the Seymour Mine and Development Company to the Westside Mill at Tonopah. Sampling found the ore averaging \$13.45 per ton. Three weeks later ore from the Springer-Mulcoy lease was hauled to the Silver Peak Mill. This was good milling ore and 60 tons daily were contracted for processing.

Four months after the Weepah strike had caught the nation's fancy—the boom was over! It had become apparent that considerable time and development would be required to make the two major mines productive. Small claim holders began to drift away and, within the year, Weepah had reverted to the status of a small mining camp.

In 1935, the golden ores of Weepah were finally readied for big-time production. A new mill with a 250-ton capacity was built. A pipe line carried water up to the camp from a well near Gilbert Junction, seven miles northwest. A new

PROSPECTING TREASURE HUNTING

PROSPECTING & MINING SUPPLIES

KEENE ENGINEERING

**SEND FOR
FREE CATALOG**

Dept. D **KEENE ENGINEERING**
11483 Vanowen St., North Hollywood, CA 91605
(213) 764-6114 — (213) 877-7240

substation at Millers supplied electric power via a special pole line to the isolated camp.

The open-pit method of mining was used and power shovels stripped away the overburden exposing a 40 to 60 foot-wide ore body—the depth of which was still unknown. J. C. Perkins was mine superintendent and 50 men were employed. Three years later, operations were shut down. The reasons were clouded. Possibly, the ore was too low grade or the ore body had run out. The mill was dismantled and hauled to North Umerland in Monitor Valley.

Many interesting stories are told about Weepah and Ernie Stockwell's is one of the most exciting. We met Ernie when visiting Tonopah old-timer Fred Steen—former auditor of the Belmont Mine. Ernie was employed at Weepah as a power shovel operator. He told us about the day his shovel uncovered a small vug in the hanging wall. When he inspected it—he found it filled with gold nuggets. Ernie called Supt. Perkins and they raked about three pounds of nuggets into a hat.

Another story involves one of the many out-of-state visitors to Weepah. An elderly lady, in a battered car with an Indiana license plate, stopped at a Goldfield garage and requested direction to Weepah. After supplying them, the attendant asked her what she was going to do there. Smiling, she reached down and picked up a prospector's pick and an ore sack. "I'm on my way to visit my daughter in California," she replied, "and while I was in Salt Lake City I read about the big strike and decided to spend a few days digging

a couple of sacks of gold."

Today, Weepah still lies in a remote valley far from civilization. Only a half-dozen buildings remain among the ruins of dozens. Near the discovery site, the skeleton of the mill looks down on the empty main street. To the west, the glory hole lies like an open wound among the tremendous dumps. There is a feeling of nostalgia and loneliness for the strike which promised so much and gave so little. We join the lonely ghosts that mourn the golden dreams and we, too, weep for Weepah. □

FREE 68 PAGE CATALOG

JEEP OWNERS • CAMPERS • HUNTERS • FISHERMEN
THINGS YOU'VE BEEN LOOKING FOR
AND SOME YOU'VE NEVER SEEN!



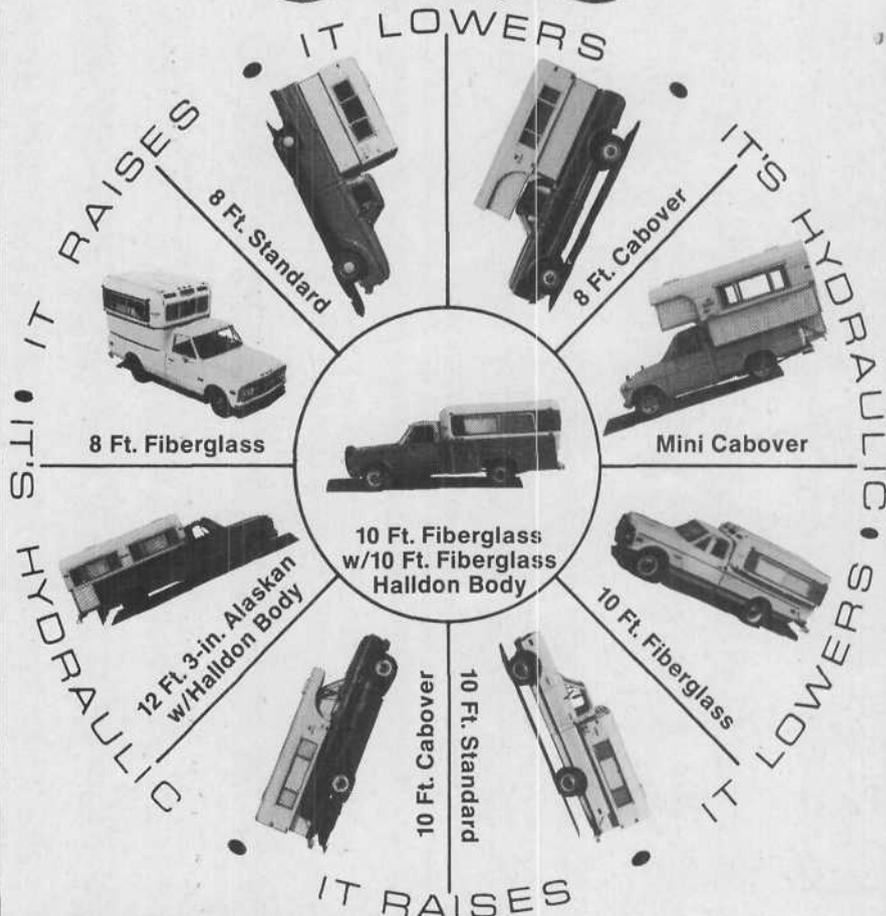
FLOTATION TIRES
&
WHEELS
UNIQUE
OFF-ROAD
&
CAMPING
EQUIPMENT!

FOREIGN & AIR MAIL
REQUESTS \$1

SEND TODAY—INCLUDE ZIP CODE!

DICK CEPEK 9201 CALIFORNIA AVE Dept D
SOUTH GATE CALIFORNIA 90280

THE ALASKAN CAMPER



There's a camper for everyone's need at Alaskan.

Sold and installed only at Alaskan Camper factories at factory prices. Write today to the factory nearest you for free folder describing the most advanced camper on the road.

R. D. HALL MFG., INC.
9847 Glenoaks Blvd.
Sun Valley, CA 91352
Dept. D-4

Factory Outlet: ALASKAN
CAMPER SALES, INC.
Interstate 80 (half way
between S.F.-Sacramento),
Rt. 1, Box 332, Suisun
City, CA 94585, Dept. D-4

U. S. PATENT NO. 2879103
AND 3652119

CANADIAN PATENT NO. 637-543

ALASKAN CAMPERS
NORTHWEST, INC.
6410 So. 143rd St.
(Tukwila) Seattle,
WA 98168, Dept. D-4

ALASKAN CAMPERS
SOUTH CENTRAL, INC.
9042 Long Point Rd.
Houston, TX 77055
Dept. D-4

ALASKAN CAMPERS MIDWEST
1100 Denver Ave., Fort
Lupton, CO 80621, Dept. D-4

ALASKAN CAMPERS
NO. CENTRAL, INC.
3726 No. 9th Ave.,
Sioux Falls, SD 57104
Dept. D-4

ALASKAN CAMPERS/NO. EAST
401 West End Ave.,
Manheim, PA 17545
Dept. D-4

ALASKAN CAMPERS
WESTERN CANADA, LTD.
5539-6th Street S.E.
Calgary, Alberta,
CAN. Dept. D-4

Lowest Photo Print Prices Highest Quality

KODACOLOR FILM
DEVELOPED & PRINTED

8 Jumbo Prints (rectangular)\$1.78
12 Jumbo Prints (square)\$2.18
12 Jumbo Prints and
New Roll of Kodacolor except 126\$2.98
12 Jumbo Prints and
New Roll of Kodacolor film, 126\$3.07
Kodacolor Neg reprints (square)\$.14

All prices comparably low.
Price sheets and envelopes
available.

No gimmicks
No lies

47 years of continuous
service guarantees your
quality.



MARKET BASKET PHOTO CO.

P. O. Box 370, Yuma, Arizona 85364 or
P. O. Box 2830, San Diego, Calif. 92112

TREASURES IN THE TURTLES

by Jack Pepper



ON THE surface the waybill to re-discover the Lost Arch Mine is easy to read. Just find a natural arch in Southern California's Turtle Mountains and then start scooping up the yellow nuggets in the nearby wash.

But, like one old-timer once told me, "the more time you spend reading about lost diggings, the more confused you get. You can't find gold in a library." I later learned one of the reasons for his sage advice was he couldn't read.

Even so, maybe I should have taken his advice—or maybe I should have done even more research so I would have become so confused I would have scratched the whole thing. Instead I took my notes and headed for Indio, California, where two veteran treasure hunters operate a television shop to make enough money to provide for their families—and finance their treasure trove expeditions.

Mel Jenkins and Hank Reans have a sideline company called Treasure Research Unlimited. I have been with them on many expeditions in the West and in Mexico. They are practical business men in their store, but just mention "lost mine" in their presence and they automatically reach for their metal detectors.

The following weekend, in two four-wheel-drive vehicles, we headed for the Turtle Mountains, which are located south of Needles and west of the Colorado River, to find the Lost Arch Mine, first discovered in 1883.



The steep and washed-out road up to Horn Spring and the Virginia May Mine is only for veteran four-wheelers. But rockhounds will find it a lucrative area.

Three months and three more expeditions later we still have not found the RIGHT arch.

Although so far we have not found

the arch, we have discovered a wealth of gem material such as chalcedony, agate, jasper, and geodes, not to mention petrified wood and beautiful nature-sculptured ironwood. (See *Desert*, February '71 for an article by Mary Frances Strong on gem collecting in the northern part of the Turtles which is more accessible than the southern section.)

Also we have discovered two abandoned mines where we found several good bottles and other artifacts. And, due to its rugged terrain, even for four-wheel-drive vehicles, the area is uncrowded and offers spectacular photographic challenges. **WARNING: ONLY VETERAN FOUR-WHEELERS SHOULD ENTER AND MORE THAN ONE VEHICLE IS SUGGESTED AS IT IS MILES TO THE NEAREST HIGHWAY IN CASE OF A BREAKDOWN.**

The fact that we so far have failed to find the Arch puts us in some good company. The late Erle Stanley Gardner (using airplanes and helicopters), and veteran treasure hunters Walter Ford and Ken Marquiss also came up with a blank



Veteran Treasure Hunter, Ken Marquiss, in 1935 took the photo (left) of old-timer Charlie Brown who took advantage of "city dudes" by directing them into the Turtles in exchange for grub.



Hank Reans and Mel Jenkins (left) found several old coins at a mill site. Castle Rock (below) as seen from one of the rugged Turtle peaks. The Mopah Peaks (right) rise above the valley floor.

to find the right arch.

But, like the others, we are firmly convinced the gold is somewhere in the Turtles, or the nearby Old Woman Mountains—or in the Trigo Mountains across the Colorado River. If this sounds confusing, it is because it is so. So, before going into the search areas, let's examine the facts—and legends—of which there are several. Following is the one accepted by most explorers:

In 1883, two miners, a Jim Fish and his partner known only as Crocker, were making a leisurely prospecting trip while enroute from Nevada to San Bernardino.

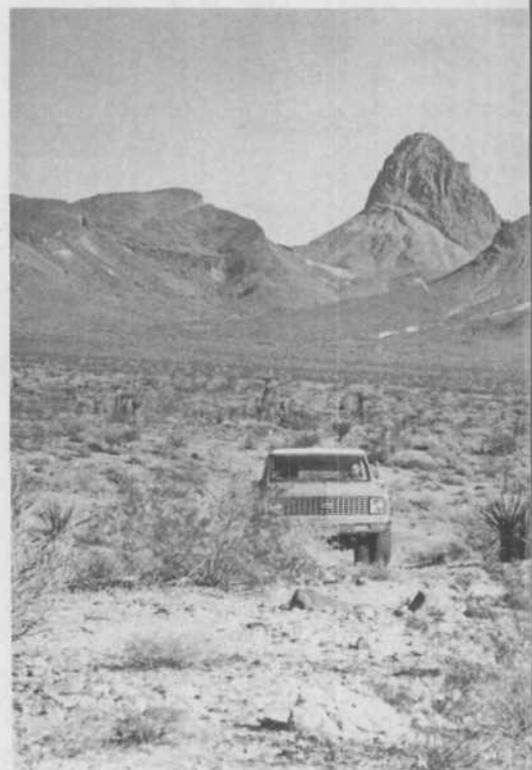
They were traveling in an "old-fashioned buckboard" pulled by two horses and in which they carried their mining supplies, grub and a large wooden barrel of water.

It is reported they spent at least two months on their prospecting trip. If so, they must have either had an inland water source—which is unlikely due to their later tragedy—or else they kept fairly close to the Colorado River from which they replenished their water supply. Let's assume they prospected in the vicinity of the Turtle Mountains or the nearby Old Woman Mountains. And here is where the confusion starts, for many old-timers

did not make a distinction between the Turtles and Old Woman Mountains as is made today on the maps of the San Bernardino County.

One evening, as they made camp and were starting to cook their chow of sourdough biscuits, beans and rabbit meat, they discovered the water barrel had sprung a leak and the life-giving liquid was nearly gone. Only a couple of canteens of water remained.

It was summer and—according to reports—they were at least two days away from the Colorado River. As long-time prospectors, they knew two canteens of water would not support them and their horses for a two-day trek across the searing desert. And they hesitated to travel



at night since there would be no visible landmarks to guide them to the river.

That night they agreed to spend the next morning looking for a water hole so they could replenish their supply. They decided they would meet back at camp at noon, and, if not successful, would try to make it to the Colorado.

The following morning, according to Fish, Crocker went up a wash (or canyon) to the left and Fish went to the right looking for palo verde or palm trees which might indicate underground water.

Fish later stated he had gone up the canyon past giant boulders and then entered a small wash and around a bend



and sighted a natural arch or "natural bridge that spanned the wash." Exhausted, he crawled up to the arch to rest in the shade. It was then he sifted the course sand to see if there were indications of water. Instead, he found gold nuggets!

His thirst momentarily disappeared as he jammed the nuggets into his pant pockets and realized he had struck a bonanza. But, as the noonday sun created a temperature of over 100 degrees, his sanity returned and he headed back to camp.

Arriving at the buckboard before his partner, Fish took a swig of water (probably more than his share) and when Crocker returned he showed him the gold. But now it was over 100 degrees so they decided to try and make it to the Colorado



Arizona community which was a flourishing freight station.

It was several months before Fish was able to return to the Turtle (or Old Woman?) Mountains to find his lost bonanza. But his search was fruitless. From 1883 until his death in 1900, he searched throughout the desolate mountains but failed to rediscover his gold nuggets.

Before his death in San Bernardino, Fish was interviewed by a Horace West who later related a sequel to and another search for the Lost Arch Mine.

Around 1900 a German naturalist turned prospector whose name was Kohler

was in the same country and discovered a natural arch which intrigued his scientific mind. He made a sketch and notes about the arch, but, not having heard of the Lost Arch or Fish, did not prospect that immediate area. Having run out of supplies and money, he decided to return to civilization and work until he could provide himself with another grub-stake.

On his last day out, he met another prospector named John Packer and they camped together that night. During their conversation around the campfire, the German mentioned the arch. Packer, who was

River. They were down to less than a canteen of water—and gold could not be spent by dead men.

They traveled all that afternoon and all that night, heading for the river by watching the stars. On the late afternoon of the second day they reached the Colorado and plunged into the life-saving waters of the river.

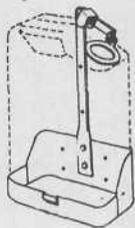
They were life-saving for Fish, but not for his partner. Crocker died en route to Ehrenberg. Why Fish went to Ehrenberg which was located across the river in Arizona, is a matter of conjecture. It is possible that since Needles, California, was just being established there were no medical services as would be available in the

All that's left of the mill site at Horn Springs (above) are old artifacts, abandoned vehicles and trash. Robert Jenkins (right) found three good bottles and several agate specimens.





STOP THAT THIEF WITH LOCKSTRAP



A revolutionary new design secures all G.I. fuel cans to your carrier or holder and locks your filler cap. Attaches to back of carrier. All steel construction, zinc plated. **Type B Only \$7.50**

PLUS POSTAGE. 2 LBS.

Send for **FREE Brochure** Showing Other Models to Fit Any Vehicle.

DEALER INQUIRIES INVITED.

1141 Wiltsey Rd. S.E., Salem, OR 97302

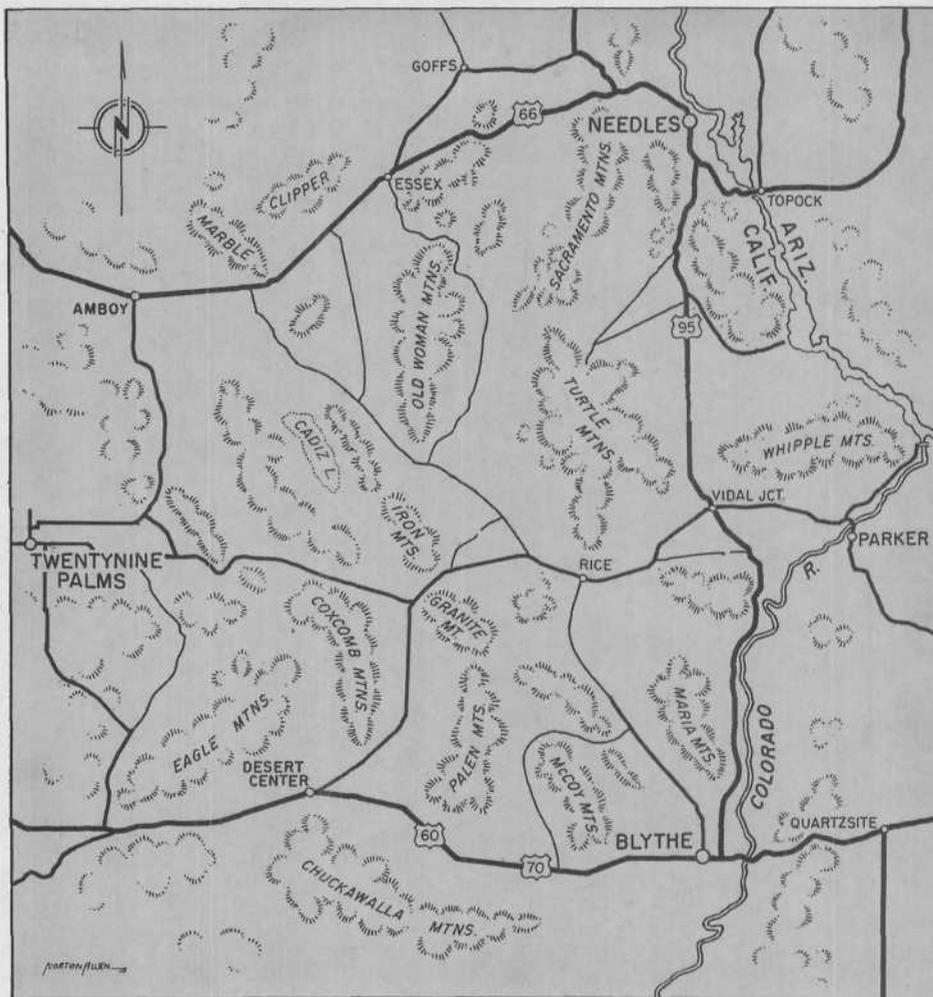


"Charlie Russell" Greeting Cards

Reproductions of ten famous C. M. Russell paintings are now available in an exclusive collection of greeting cards for everyday use. This unique assortment includes 6 birthday cards, 2 get well, 1 friendship and 1 congratulations. You will be proud to send these unusual cards . . . and folks will be thrilled to receive them. Just \$3.00 per box of 10 cards—plus 35c postage. Order your "Charlie Russell" assortment today or send for **FREE** catalog of greeting cards and gifts.

THE LEANIN' TREE RANCH

Box 1500 Boulder, Colorado 80302



looking for the Lost Arch, suggested they join forces.

They agreed to find work, get the necessary supplies and meet in one month at Sunflower Springs, located on the east side

of the Old Woman Mountains. At the appointed time, Packer arrived at the meeting place. When Kohler failed to show up, Packer went to Needles.

He learned the German had secured a job loading lumber for the Santa Fe Railroad at Amboy, but was killed when railroad ties fell on him in a freak accident.

For more than a decade Packer searched in the Old Woman and Turtle Mountains, but he, too, failed to find the right arch. Despite his failure, just before he died, Packer said he still believed in the Lost Arch placer diggings.

Author Walter Ford, who has spent decades exploring the Southwest and researching lost mine legends, gives a different version of the Lost Arch in an article which first appeared in the November, 1944 issue of *Desert Magazine*. In his article entitled, "We Found the Lost Arch—But Not the Nuggets," he states:

"On a withering summer day in the year 1883, a man named Amsden staggered into the little town of Goffs in the last stages of exhaustion, his pockets loaded with gold. Some weeks previous he had departed from Needles with a local pros-



Beautiful selection of authentic hand-crafted Indian jewelry. This particular sterling silver Squash Blossom necklace is over 60 years old and they just don't make them like that anymore!

Also, ladies and mens leather jackets, purses and, of course, a tremendous selection of moccasins.

BankAmericard
Master Charge

PHONE 714 325-6425

THE MOCCASIN SHOP

174 NORTH PALM CANYON DRIVE PALM SPRINGS, CALIFORNIA 92262

OPEN SUNDAY

pector on a secret mission into the Turtle Mountains.

"When he had been revived sufficiently to talk he told about his find—a find so rich that gold nuggets could be had for the mere trouble of picking them up. Amsden stated that they were too intent in adding to their hoard of gold to notice their diminishing supplies of water and food until they found them nearly gone. Taking what gold they could carry and a scant amount of water, they started to make their way back to Needles.

"Somewhere along their return journey the prospector succumbed to the heat and Amsden was forced to continue on without a guide. According to accounts, the two emerged from the Turtles on the western side, but when Amsden had to carry on alone he headed down a long wash toward the Santa Fe Railroad tracks and finally reached Goffs." (Goffs is located north of the Turtle Mountains and east of Needles.)

Evidently, Amsden had had enough of prospecting for, immediately after recovering, he returned to his home in the East taking his secret with him. However, a few years later, Dick Colton, one of the men who assisted Amsden when he tottered into Goffs, received a letter from Amsden, describing the location and enclosing a vague map. He stated the placer was in the Turtles and not far from a natural arch.

Colton and three friends spent all of their spare time trying to find the arch. Ford says one of the searchers, Mort Immel, stated, "I suppose we would have been out there yet if our shoes had not given out. The other boys were certain we were on the right track, but I told them to throw the darn fish story in the fire and forget it."

And that's what Walter Ford did until one evening he was visiting his friend, John Hilton, the famous Western painter and a veteran rockhound. Ford said that during the conversation he mentioned the Lost Arch and Hilton recalled seeing a natural arch on one of his gem-hunting expeditions.

Ford recounts in his detailed article how he and Hilton, a month after the conversation, entered the Turtles in a car especially built for desert exploration. This was during World War II and before the civilian use of four-wheel-

Continued on Page 24

Ride 'n' Dine \$5.95



Enjoy tender prime rib, Virginia baked ham or the chef's gourmet special.

Go sky-dining tonight! After five daily, our special low price buys an exciting round-trip Tram ride to the 8,516-foot level of Mt. San Jacinto— and a choice of three delicious dinners in the Alpine Room with the starlight for company!

The Tram ride alone is the thrill of a lifetime — the only trip of its kind in the whole, wide world. So bring a sweater and hop aboard. At the top, step out to see the desert spread out before you — spectacular by day, enchanting by night. A great treat for the family. Ride 'n' Dine rates for young adults 13-17, \$4.95; children 4-12, \$3.25.

If you haven't ridden the Tram, you haven't been to Palm Springs.

Palm Springs Aerial Tramway

For more information:
Palm Springs Aerial Tramway
P.O. Drawer FF
Palm Springs, California 92262
Phone (714) 325-1391

Ride 'n' Dine Phone (714) 327-9711

Tram cars leave Valley Station daily from 10 a.m. to 7:30 p.m. Last car down the mountain at 9 p.m. Always plenty of free parking. Special group rates.

DESERT

Bureau manager in Escondido for the San Diego Union-Tribune, Ernie Cowan spends most of his free time exploring the back country of San Diego County, Arizona and Mexico. An authority on the Anza-Borrego desert, here is another of his interesting trips into that scenic area.

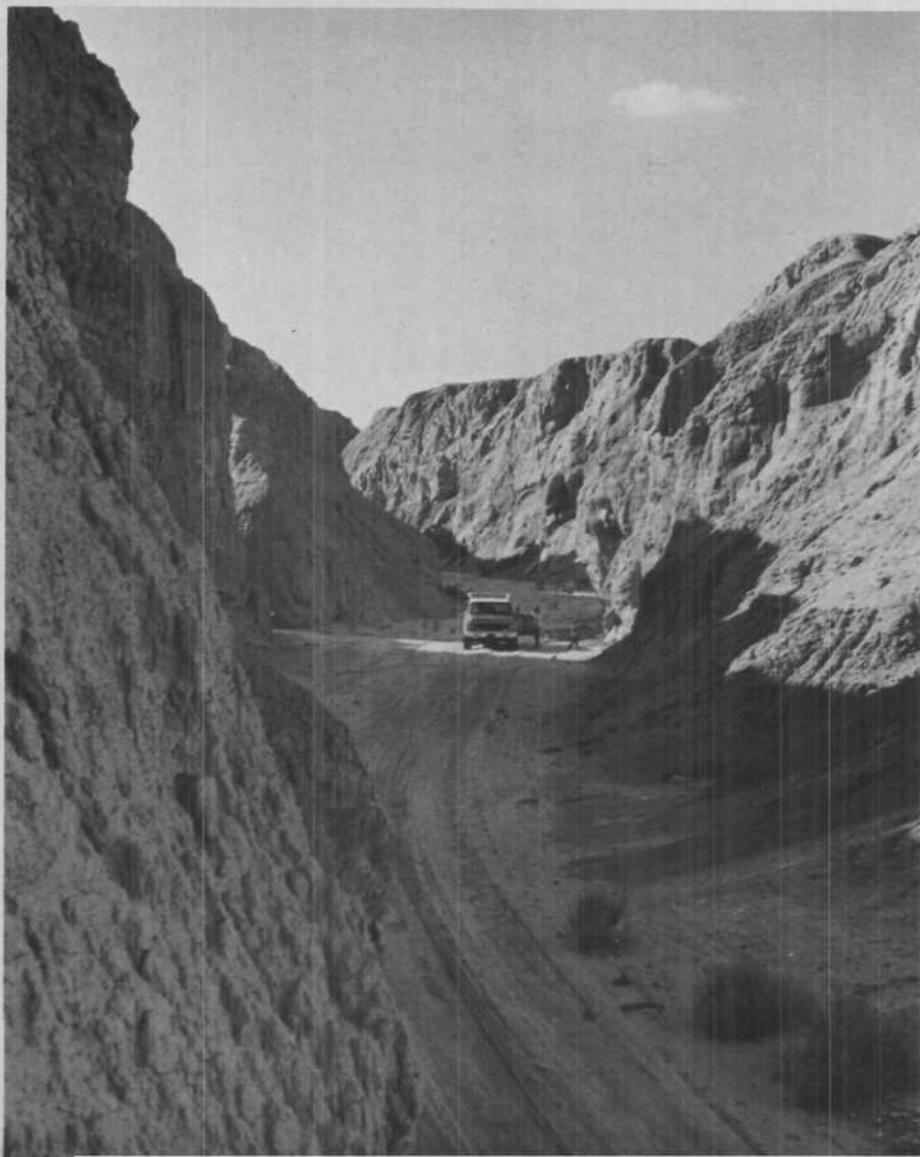
IT WAS nearing midnight as we bumped along in our topless World War II jeep, huddled in heavy coats to protect us from the December cold. As we slowly moved through this new gorge, our lights danced strangely on the high canyon walls. My love affair with the desert was still in the dating stage. I had not yet settled down to a full-time relationship with this beautiful area.

We had started our journey into the Carrizo Badlands early in the morning and we were following a series of maze-like canyons in an attempt to return to our starting point, which was the cabin of a friend.

The cold and hunger were catching up, however, so we pulled into a sheltered cove of the canyon and sat in the sand to enjoy a cold-can dinner. Love was growing. A deeper relationship between myself and the desert was developing.

This was nearly 10 years ago and some college buddies and I were exploring the twisting washes which finger north from Vallecito Creek in the southern part of California's Anza-Borrego Desert State Park.

Since then I have explored most of this interesting area on foot or by vehicle and none of the love has worn away. Of all the areas of Anza-Borrego, perhaps none offer the same kind of beauty, solitude, mystery and adventure that can be



LOVE AffAIR

by
Ernie
Cowan

Photos by the author



Author and his party (opposite page) camped at Palm Spring and explored Arroyo Seco del Diablo, photographed scenic Palm Spring (above) and crawled inside the mud caves (left) at Arroyo Tapiado.

found in this patch of earth, roughly eight by ten miles square.

The canyons here can swallow a jeep club, or thrill the lone traveler. There are view points where you can see forever, or watch shadows creep across the land at sunset.

The Carrizo Badlands are an incredible jumble of rock and earth located north of the historic Butterfield Overland Stage Route and extending from the Imperial-San Diego County line west about 10 miles. A day's jeep loop trip through some of the interesting canyons here can be an adventure, while more time can easily be spent examining the many out-of-the-way places to be found.

A good place to begin a visit to the Badlands is Mesquite Oasis, also known as Palm Spring. This is located 1.6 miles north of county highway S-2 and about four miles east of Aqua Caliente Hot Springs.

Palm Spring is a popular camping location since it can easily be reached towing a trailer. There are sheltered little areas here that provide for privacy. The spring is also a place of history, once being the location of a stage station serving the needs of the Butterfield Overland line that operated from 1858 to 1861.

State park rangers can give you a good map of the area, but the most detailed

Continued on Page 39

THE CASE OF THE YALLER JACKPOT

by Ken Marquiss

WITH ALL due respect to the wisdom of a host of well-meaning friends and/or loving relatives, I still maintain there is a difference between "lost mine hunting" and plain old sordid gambling.

It is true that no self-respecting Vegas or Reno gambler would have the gall to suggest that kind of odds—but the winnings from just one good mine strike puts their kind of rewards in the piker class. And there are the fringe benefits too! Good healthy exercise, a goal to chase, and your choice of style costs for enjoying the joys and tribulations of the out-of-doors.

And then there is the scheming and planning for your trips. Those kindly critics just don't understand the interesting intricacies and fascinating facets of a man's pet hobby!

Take the case of what I call "The Yaller Jackpot" for example.

Some time before World War II, I was starting a single-handed new-roof-

and-repairs operation, and was doing O.K. until the defense preparations for war dried up the supply of shingles, roll stock, nails and mastic. Most customers waited until rain leaks sold them on a roofing job, but old Mr. McGee was different.

It was a warm sunny spell; he wanted a good roof right away—and he hung around watching the job until it was done. So we had several lunch hours to shoot the breeze. He was friendly enough—in a brusque sort of way.

Somehow the talk drifted to Arizona, and when I told him I had shipped gold ore—from a lease—to the Reed custom mill in Oatman, Arizona a few days before, he started to get really interested. He quizzed me at length about what I knew of the area south of Oatman.

Then there were questions about my mining background; next were some quizzes about personal references, and finally a prospecting proposal of going "halvers" with him if he gave me an honest-to-



gosh, first-hand gold lead with "real big money possibilities."

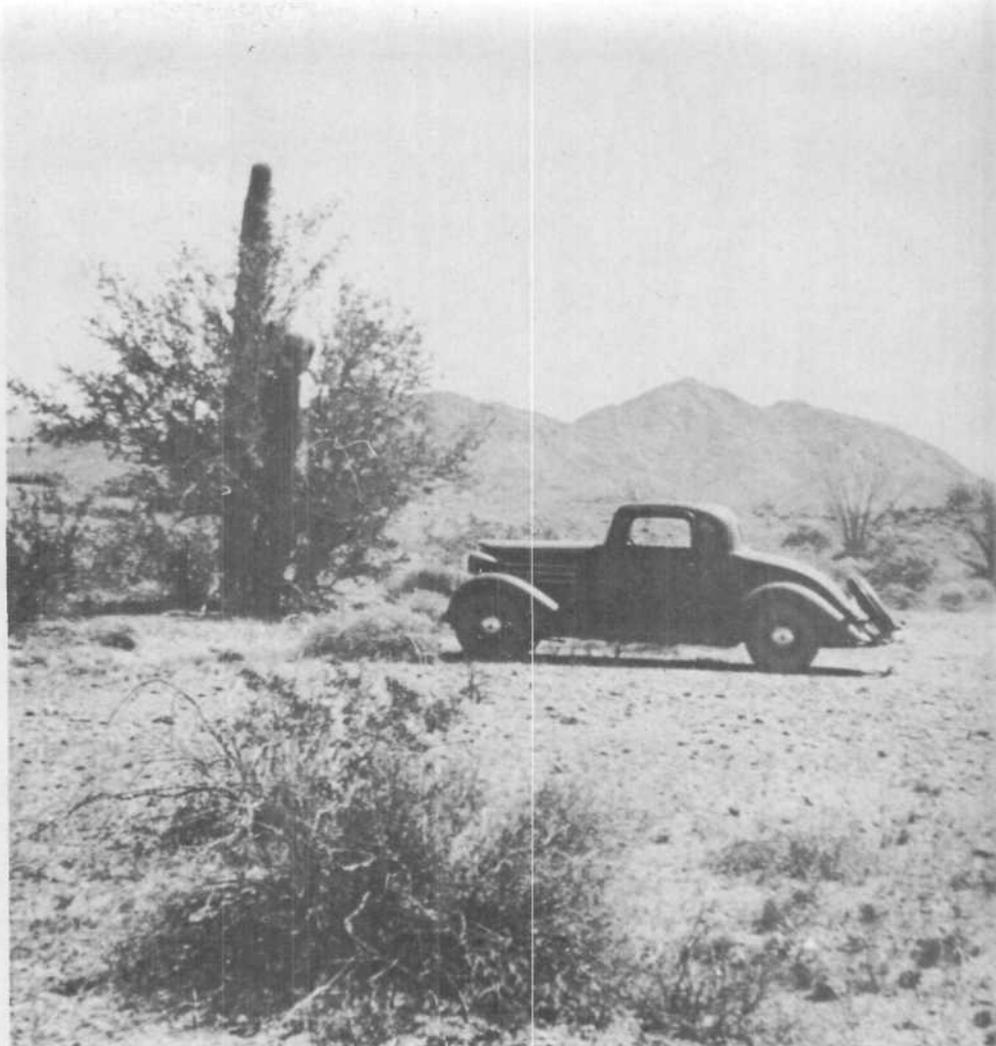
The story was about a rich dry placer gold discovery in the area south of Oatman; and the information looked good enough to warrant a real try in the search zone. So I put the information away in the little black notebook until work slacked off and I could make a trip.

I had new-family responsibilities in those days, and work was more plentiful than usual; so it was late winter before I got squared around for a trip. A prospecting buddy named W. E. "Doc" Reed and I borrowed a car with fat donut tires for sand travel, went over to the area, and dug dozens of barren test holes—but couldn't find the right "marker."

The second trip, alone and several years later, wasn't any better. Most of my available time was spent repairing a "lemon" of a car that had steering problems.

The third trip was not until the late spring of '67. My older son had just been mustered out of the Navy, and wanted to borrow the old man and his rig "for a trip to camp in the wilds, look up at the stars at night, and listen to the desert quiet for a change!"

So on a treasure hunting trip to central Arizona, we swung by the placer area. We did some brief foot slogging and trail bike searching—without luck—until the siren



"Ralph Nader was still playing marbles when, on my second trip, I had to walk out nine miles to find another steering knuckle for my broken-down Lafayette."

Photos by the author

"On the third trip, with good equipment, we found a camping spot. Johnny said my breakfast grub was great, but objected to the early hours, pointing out he was NOT in the Navy anymore."

song of the other treasure dream became too strong and we took off.

The placer story Mr. McGee had told me so long ago seemed solid enough—but it had a couple of strange twists.

He said that he and an old friend named George Conrad, who I understood was then a city councilman or something in Los Angeles, had for several years in the early Twenties grubstaked an old guy name McCloud—or Macleough.

The prospector had a hardrock hole somewhere six or seven miles southward of Oatman. It was a pockety kind of stringer that he worked alone, with single jack, old-fashioned fishtail drill bits, and powder. McCloud used a team of burros to hoist his small bucket of rocks by way of a rickety snatch-block and roller gimmick hooked to his pole head frame.

The stringer would widen out enough to furnish a few pack-saddle loads of good ore, and he would write his grubstakers that "we got a real mine!" Then it would pinch down, and in a couple of months



McCloud would put the bite on McGee and Conrad for more groceries and powder; sort of an on-again, off-again situation.

This had gone on for a little over a year when the prospector got sick—worrisome serious but still-able-to-walk sick.

So he decided to take his burros, and go for medical help. He headed west to cut the Oatman road north to Topock, and catch a ride into Needles. He rode one burro, and loaded food and water and a few possessions on the other.

There was a small all-season spring about three miles west of his workings, and he headed for that first.

The weather was hot, and progress was slow; so when he came "to a little cup-like valley with a flat bottom, maybe as big as a city block that was easy to remember," he decided he had better lighten the load on the pack burro so he could alternate his saddle and make faster time.

The pack saddle held a short-handled shovel, mortar, test pan, carbide light,

small pick and other tools. These he decided to bury in the flat sand a few yards above a "little puddingstone dyke that ran east and west and would make a good marker."

After a big drink of water he got busy with the shovel, and "he hadn't gone knee deep before he hit hardpan" topped by a four-inch layer of the thickest concentration of black sand he had ever seen. Gleaming like a multitude of little sparks against this dark background were small nuggets and "colors" of placer gold.

Forgetting his misery for a while, he filled a two pound cloth salt sack with dry panned concentrate. Then he buried his tools in the hole, and headed for the road.

His luck held, and he had barely reached the road when a man in a new Overland Star gave him a welcome lift to Needles. There he caught a train for Los Angeles, where there was a doctor he knew and trusted.

This medico diagnosed his illness as terminal, put him in the hospital, and

gently as possible disclosed his findings and suggested he take care of any important matters as soon as possible.

The prospector called Conrad on the phone, gave him the sack of concentrate "to pay my bills" and told his grubstaker the story of his find. As he said, "She's potater patch shaller, and we got us a ripsnorter of a yaller jackpot—man what a jackpot!" Mr. Conrad promised him they would all go out to stake the area together as soon as McCloud was on his feet again—but it was not to be. Within a fortnight the old prospector had cashed in his chips; and McGee and Conrad were left with only a puzzling story and a salt sack of concentrate.

They panned out and sold \$809.00 worth of gold dust from that sack of concentrate; which would make it better than 36 ounces (at the old price). So they could hardly wait until the desert cooled off and they could make the first of several trips looking for the gold. Trips that were no more productive than mine.

The puzzling angles are: why would a sick man pack a lot of tools with him, and was the find made on the east or west side of the little spring?

When I asked McGee about that, he gave me a funny look and said, "Who the ---- can figure the mind of even a well prospector?" And maybe he had something there!

The two original grubstakers have long since staked their final claim, and I'm sure won't begrudge you your turn at the wheel of fortune; and I'm too old and busy with other things to give the time to it.

The black sand is shallow enough that a good metal detector might help; if you work a "bug" over the old rusty tool it will be sure to howl like a banshee.

I never could find the "little puddingstone dyke" (most of the area is igneous intrusives) and there were two seeps or waterholes that might—by stretching a point—fit the directions. The topographic description certainly would indicate a natural riddle and concentrating area; but where did the gold erode from?

Your guess is as good as mine—maybe the answer is in the old saw "Gold is where you find it!"

If you pull the lucky handle I hope McGee's words ring true. The only yellow slot machine stuff I ever saw — was lemons! □



"The winter after I first heard of the 'Yaller Jackpot' I teamed up with a prospector buddy and we did a lot of searching. This was before the days of the modern four-wheel-drives, as you can see."

The '73 Jeep[®] Truck. For exploring in style, you'll hail our new cab.



This pickup comes with new passenger car interiors and rugged Jeep guts.

The Jeep Truck has always had a reputation for being tough. After all, it's got the most famous 4-wheel drive of them all . . . and a payload capacity, on its 8000 Gross Vehicle Weight model, of 3500 pounds. It's been known for its low center of gravity, which gives you extra stability on steep, rocky hills. And its high ground clearance, which takes you over those stubborn obstacles that would make other pickups turn back. Now the Jeep Truck will be famed for its interior, too.

Seats have deep foam padding. (Bucket seats are available.) There's a new padded instrument panel. And a new padded steering wheel. Plus color-keyed mats. And air conditioning, if you want. When you're out exploring for your own campsite, you need guts—and comfort. The Jeep Truck gives you both.

Toughest 4-letter word on wheels.

 **Jeep**

Buckle up for safety...drive your Jeep vehicle with care and keep America the Beautiful.



Eileen Workman finds some chalcedony on one of the slopes. There are many excellent rockbounding areas in both the Turtle and Old Woman Mountains.

TREASURE IN THE TURTLES

Continued from Page 17

drive vehicles.

Leaving the road (now the paved highway from Desert Center to Vidal Junction) 14 miles east of Rice, they traveled 16 miles north "over some of the roughest desert country I have ever encountered," according to Ford.

Ford found Hilton's arch and nearby a giant saguaro cactus, which he states must have been a landmark even back in 1883. However, as Ford stated in his article and told this author recently, the arch was in volcanic lava. There were no traces of hematite, magnetite or limonite, iron ores which might contain gold, leading him to think it was not the RIGHT arch.

Armed with the information supplied by Walter Ford, on our second expedition into the Turtles last October we found the site of Hilton's arch. However, it had collapsed (as Walter had predicted) and we, too, found no signs of placer gold. We did bring back some beautiful chalcedony roses. The area is located on a small hill a few hundred yards to the east and south of Castle Rock, a large butte and landmark which appears on most San Bernardino County maps of the area.

A third version of the Lost Arch diggings is found in John D. Mitchell's *Lost Mines and Buried Treasures Along the Old Frontier*.

Although Mitchell places the gold in the same area, he states it was originally discovered by a group of Mexican prospectors. After the discovery, according to Mitchell, the Mexicans built two separate adobe rooms and extended a roof over the open space between the two huts. This large adobe arch was called a San Juan.

Mitchell states the Mexicans "sluiced \$30,000 worth of gold before the dry season dried up the water holes." They abandoned the site and weather and Indians destroyed the huts, leaving only the man-made arch. When the Mexicans returned, they could not find their original discovery, he states in his book. (One of the first lost mine authors, Mitchell, died several years ago.)

Whether the above accounts are facts or legends—or both—they are the only pieces so far reported about the confusing and complicated jig saw puzzle of the Lost Arch Mine.

As stated at the beginning of this ar-

ticle, this author, along with veteran treasure hunters Mel Jenkins and Hank Reans, has spent many weeks in search of the placer gold. We have explored the west side of the Turtles, the inside of what we call the "horseshoe" on both the east and the west sections and the southern areas.

The area we call the "horseshoe" is the section in which is located Castle Rock and Mopah Peak and is bounded by the east and west pinnacles of the Turtle Mountains. It can only be reached by going north from the dirt road which crosses the railroad and canal about 8 miles west of Vidal Junction. To our knowledge, it forms a cul-de-sac at the northern end.

Some searchers say there are a few natural arches in the Turtles. Other old-timers say "there are more arches than there are hunters for the placer gold." Walter Ford states, "with the exception of the Lost Pegleg mine, the Lost Arch mine probably has been more sought after than any other of the lost mines of the California deserts."

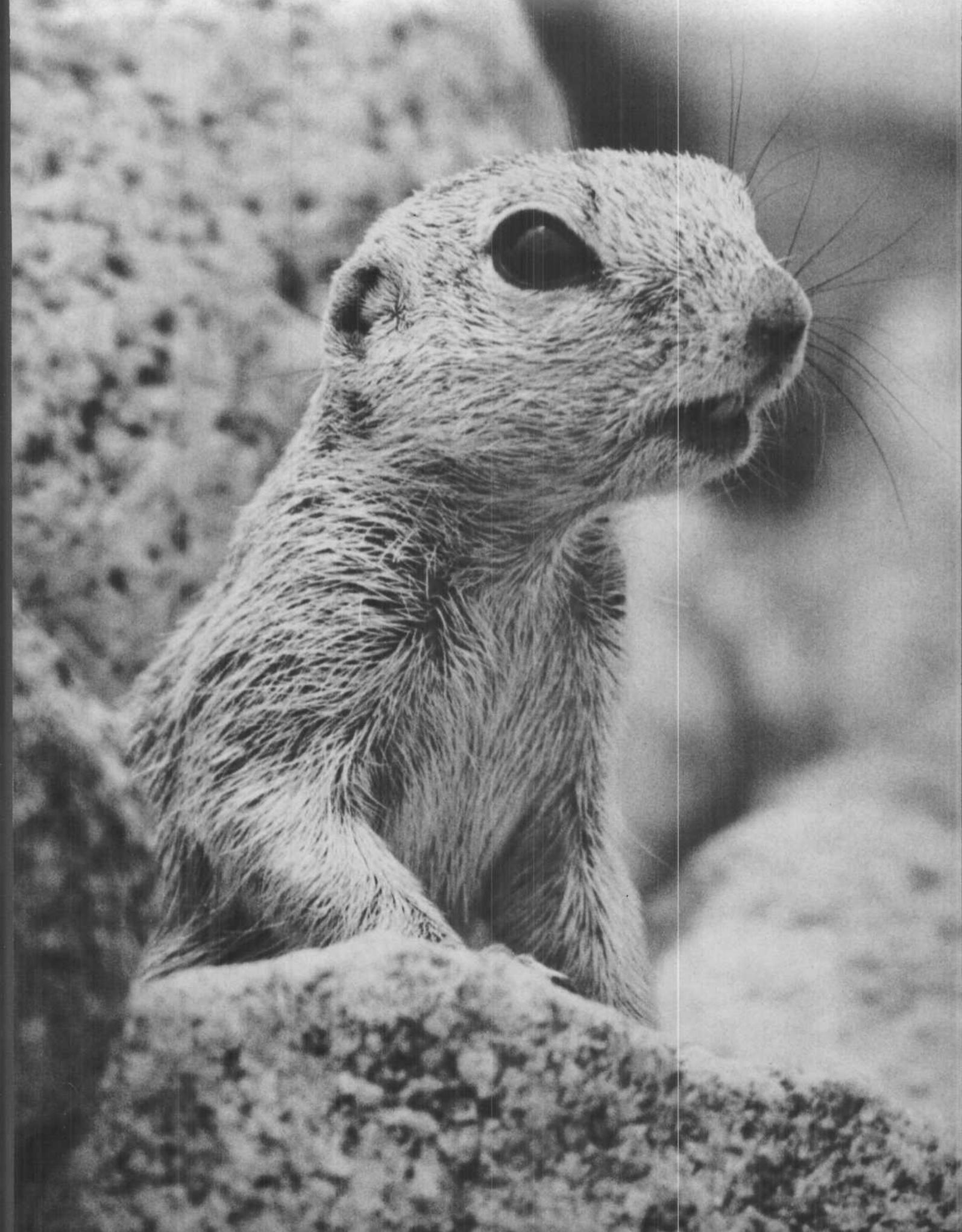
All we know is that we found iron ores which should contain gold, we have found beautiful gem cutting material, we have found old mines and mills and we have found an area of fantastic rock formations where heavens are so clear the stars seem to be only a few hundred feet above your sleeping bag—and where somewhere there are gold nuggets buried only a few inches under the coarse sand of an elusive arch.

We will be out there again soon. If you see us, don't hesitate to join us around the campfire and we will share our knowledge with you. The Turtle and Old Woman Mountains are too big to be covered by a small party. And it's just possible we might rediscover the Lost Arch Mine. □

Desert Life

by Hans Baerwald

A round-tailed ground squirrel pauses during his search for food in the salt bush areas of the sand dunes on the Southern California deserts. Squirrels are between 5 and 6 inches.





MT. SAN GORONIO
11,502

PIONEER TOWN

MORONGO

WILDERNESS AREA

DEVIL'S GARDEN

PIERSON

DESERT HOT SPRINGS

WHITewater FISH HATCHERY

62

BANNING

MT. SAN JACINTO
10,786

10

LOS ANGELES

TRAMWAY

111

R1

INDIAN AVE.

PALM DRIVE

INDIO

VISTA CHINO

RAMON ROAD

PALM SPRINGS

SAN JACINTO MOUNTAINS

CATHEDRAL CITY

WILDERNESS PINES

PALM CANYON

RANCHO MIRAGE

IDYLLWILD

PALM DE

LIVING DESERT

MAGNESIA FALLS

IND

HEMET

74

LAKE HEMET

74

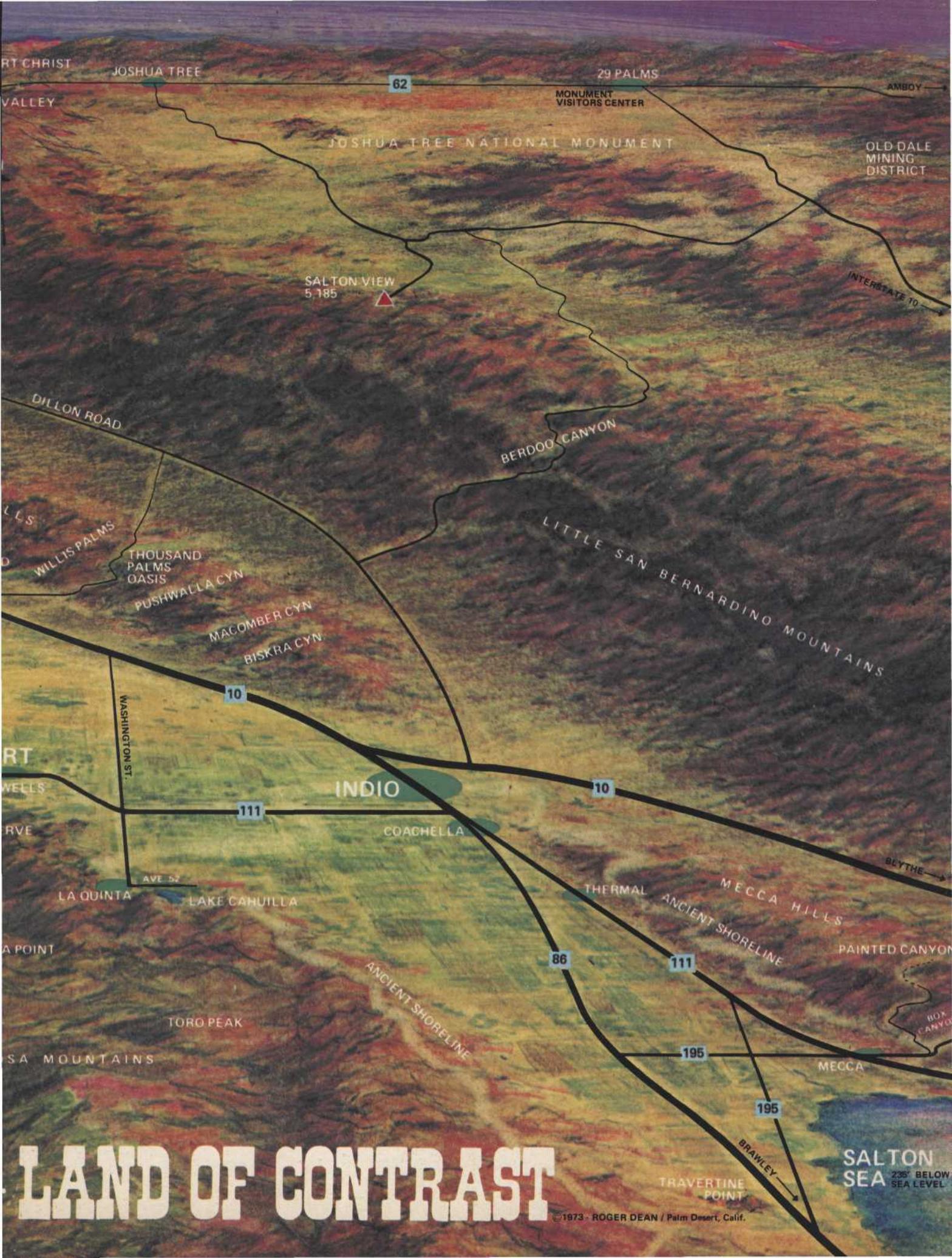
SANTA

near

SAN DIEGO

71

COACHELLA VALLEY



RT CHRIST
 VALLEY
 JOSHUA TREE
 62
 29 PALMS
 MONUMENT VISITORS CENTER
 AMBOY
 JOSHUA TREE NATIONAL MONUMENT
 OLD DALE MINING DISTRICT
 SALTON VIEW
 5,185
 INTERSTATE 10
 DILLON ROAD
 WILLIS PALMS
 THOUSAND PALMS OASIS
 PUSHWALLA CYN
 MACOMBER CYN
 BISKRA CYN
 BERDOO CANYON
 LITTLE SAN BERNARDINO MOUNTAINS
 WASHINGTON ST.
 10
 111
 INDIO
 COACHELLA
 BLYTHE
 AVE 52
 LA QUINTA
 LAKE CAHUILLA
 THERMAL
 ANCIENT SHORELINE
 MECCA HILLS
 PAINTED CANYON
 BOX CANYON
 TORO PEAK
 ANCIENT SHORELINE
 86
 111
 195
 MECCA
 SA MOUNTAINS
 195
 BRAWLEY
 TRAVERTINE POINT
 SALTON SEA
 235' BELOW SEA LEVEL

LAND OF CONTRAST

Land
of
Contrasts

from
Pines
to
Palms

by
Jack
Pepper

Within the eastern half of Southern California's Riverside County, snow-capped mountain peaks jut into the clear blue sky, towering thousands of feet above the warm desert valley floor and the Cove Communities of Coachella Valley.

The Cove Communities along State Highway 111, which include Palm Springs and Palm Desert, home of *Desert Magazine*, have more golf courses and swimming pools than any area of similar size in the United States.

South of Coachella Valley is Imperial Valley, whose sprawling citrus and date ranches surround the Salton Sea, a year-round fishing and boating paradise, 248 feet below sea level.

Just outside the periphery of Coachella and Imperial Valleys are sparsely populated mountains, hills and deserts. These thousands of acres of public lands are under the domain of the Bureau of Land Management and are a year-round playground for explorers, campers, rockhounds and photographers.

And within this half of Riverside County there are a variety of museums, art centers, Indian reservations, animal sanctuaries, scenic palm canyons, county and state parks, and national monuments. The Colorado River, only 100 miles from Palm Desert, forms the eastern boundary of Riverside County and California.

Following are some of the places and attractions which make the area one of the prime vacation lands in the United States:

WHITewater TROUT RANCH

Open the year-round every day except Monday, this is a scenic picnic area which has two large pools stocked with Rainbow trout for fishermen of all ages. A nominal fee is charged for picnicking and cost of catching the trout depends upon the size. No license required. Take the Whitewater off-ramp from Interstate 10 just northwest of Palm Springs.

THE LOW DESERT

Leaving Interstate 10 at the Palm Springs off-ramp on the San Bernardino Freeway from Los Angeles 120 miles west, Highway 111 goes through the Cove Communities of Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells and connects with Interstate 10 east of Indio. Among the attractions along State 111 (which offers a variety of motel accommodations, trailer parks and fine restaurants) are:



Wilderness Pines Recreational Vehicle Park, near Idyllwild, provides plenty of pines (above) while on the floor of the Coachella Valley (below) scenic canyons dotted with palms are a great lure for the camera buff and desert lover.





PALM SPRINGS AERIAL TRAMWAY

From the Valley Station, 2,000 feet above sea level, the Aerial Tramway cable cars carry passengers in 18 minutes to the 8,000-foot station in the San Jacinto Mountains where a panoramic view of the Coachella Valley is matched only by the sight of the majestic San Bernardino Mountains more than 50 miles distant.

The Mountain Station has an Alpine Restaurant, cocktail lounge and gift and apparel shops. Hiking and skiing trails lead to Round Valley and 11 campgrounds.

The Tramway is open seven days a week, November 1 through June 1, from 10 A. M. to 7:30 P. M. During the summer season it is closed Tuesday and Wednesday. Fares are \$3.50 per adult, \$2.50 for ages 13 through 17, and \$1.00 for children.

PALM SPRINGS DESERT MUSEUM

Located in the heart of Palm Springs, the Desert Museum is a non-profit, educational-cultural institution for the purpose of collecting, preserving and interpreting certain aspects of the fields of Art and Natural History, with supplemental activities in Music and the Performing Arts. Open to the public, it is a place of constantly varied, contrasting programs and offers changing exhibits of the archeological, ethnological and other areas of natural history of the Southwest. A new \$4,000,000 building to house the Museum is scheduled to open in 1974.

MOORTEN BOTANICAL GARDEN

One of the largest botanical gardens in the West, there are over 2,000 varieties of cactus and other exotic plants along nature trails over the two-acre site. It is open from 9 A. M. to 5 P. M. seven days a week. Admission is 50 cents for adults and free for children under 12 accompanied by adults. Located at 1701 South Palm Canyon Drive, on the right hand side just after turning off Highway 111 toward the Palm Canyons mentioned below.

PALM CANYON

Approximately 11,000 native palms—known as *Washingtonia filifera* and not to be confused with the date palms which were imported from the Far East 70 years ago—grow in the wild canyons of Southern California. Majority of these are in the canyons of Riverside County. The most spectacular are in Palm Canyon, easily reached by passenger car by turning off State 111 at So. Palm Canyon Drive in Palm Springs.

The area is owned by the Cahuilla Indians who charge a nominal car fee for the privilege of picnicking and hiking through the verdant canyons.

LIVING DESERT RESERVE

A mile south of Highway 111 on paved Portola Road in Palm Desert, this is one of the most interesting and unusual natural history and wildlife sanctuaries in the West. The main building houses dioramas with live snakes, lizards and other desert dwellers, plus displays depicting desert flora and fauna.

Nature trails wind through the desert where you can see wildlife and a cross section of identified desert plants. The Living Desert Reserve is a non-profit organization and a nominal donation is requested for operation of the Reserve. Families should not leave Palm Desert without seeing this fascinating nature reserve.

DESERT SOUTHWEST ART GALLERY

Features paintings, watercolors, sculptures and other art forms by the West's most outstanding artists. On Highway 111 in Palm Desert.

LAKE CAHUILLA

A man-made lake and recreational area nestled at the foot of the Santa Rosa Mountains where the shoreline of ancient Lake Cahuilla can be seen. Take Highway 111 east from Palm Desert to Washington Boulevard. Turn right and go through the charming community of La Quinta, left on Avenue 52 to Jefferson Street and then right to the lake. A county park, it has good fishing.

INDIO

Highway 111 rejoins the freeway at Indio which is the home of the National Date Festival held every February. Although called a "Festival" it is one of California's largest county fairs and features all exposition activities, plus the famous and spectacular Arabian Nights Pageant. This year's National Date Festival will be held February 16 through 25.

SALTON SEA AND ANZA-BORREGO STATE PARK

From Indio, Interstate 10 continues on to Blythe and the Colorado River, 100 miles to the west. State 111 goes south and travels along the east side of Salton Sea where there are many state and private campgrounds along the shoreline. State 86 goes south along the west side of the Salton Sea (no public campgrounds on this side) past Travertine Rock and to Salton City. To visit Anza-Borrego State



Live desert animals (above, left) are on display at the Living Desert Reserve in Palm Desert. It also has nature trails where visitors see identified native plants and flowers. Life-size figures of Biblical settings (right) are on display at Desert Christ Park.



A cable car (left) arrives at the Palm Springs Aerial Tramway's mountain station, 8,000 feet above the Valley floor. Giant sandstone boulders (right) in Joshua Tree National Monument make it an ideal family camping area.



Park, turn west on the paved Borrego Salton Seaway (S22) which takes you to Borrego Springs and Park Headquarters.

SALTON SEA

Fed by the waters of the canals and ranches of Imperial Valley and the runoff of the nearby mountains, Salton Sea is more than 30 miles long and 15 miles wide. It is a year-round fishing, camping and water skiing lake. The salt content is slightly higher than the Pacific Ocean. It was formed in 1906 when the Colorado River broke its banks and flooded much of Imperial Valley. Ancient Lake Cahuilla, more than 500 years ago, covered the same area but was 100 miles long and 60 miles wide. Millions of years ago most of Riverside County was under ocean waters.

ANZA-BORREGO STATE PARK

This spectacular California State Park offers all types of scenery and is rich in history. Spanish Captain Juan Bautista de Anza first blazed a trail through the area in 1774. Later the Butterfield Stage Route went through the desolate desert. There are public overnight campgrounds and during the spring it is a paradise of colorful wildflowers. Passenger car drivers can see most of the park on good gravel roads. There are also other areas which only can be reached by four-wheel-drive vehicles. For a detailed map of the area and things to see, visit the Park Headquarters just outside of Borrego Springs—which has excellent motels and other facilities. To return to Palm Desert by the mountain route, take S22 west from the Park to State 79, north of Aguanga, past the Bergman Museum (which is well worth a stop) to State 77 and then east on the "Palms to Pines Highway" to Palm Desert.

LOW DESERT SIDE TRIPS

There are many passenger car side trips, which begin and terminate in the Coachella Valley area. Dillon Road parallels Interstate 10 on the north and goes from Palm Springs to Indio. There are several interesting canyons along the road, the main one of which is San Berdoo Canyon which four-wheel-vehicles can use as a shortcut to Joshua Tree National Monument.

A good paved road out of Mecca (south of Indio) goes through scenic Box Canyon and connects with Interstate 10 and the southern entrance to Joshua Tree National Monument. Drivers of passenger cars are warned to stay on paved roads or hard gravel roads as they can be easily stuck in the soft sand of canyon washes.

SANTA ROSA MOUNTAINS

The Palms to Pines Highway (State 74) was recently designated as an official California Scenic Route. It leaves State 111 at Palm Desert and winds through the Santa Rosa Mountains as lower desert plants gradually give way to those of the higher elevations such as yucca and agave, and then climbs into the pine forests at the 5,000-foot mark.

At Paradise Valley, State 74 is intersected by State 71 which (as stated under "Anza-Borrego State Park") goes east to Aguanga and south to the State Park, or west to U. S. 395 and then to either Los Angeles or San Diego.

Continuing on the Palms to Pines Highway, State 74 goes north past Lake Hemet to the charming community of Idyllwild, a summer and winter resort. During the winter it is usually under snow so check with the Highway Patrol. To make a loop trip continue on the paved highway past Lake Fulmor and down the winding mountain slope where it connects with Interstate 10 at Banning. You can then either go left to Los Angeles or right to Palm Desert.

WILDERNESS PINES

Near Idyllwild there is an unusual and complete campgrounds for recreation vehicles. Wilderness Pines has a 190-acre park with 250 campsites having a view of the San Jacinto Mountains and nestled in natural terrain. Open all year, with the exception of the month of January, it is one of the few campgrounds which have facilities for campers' horses and riding trails. There is a swimming pool and three fishing ponds, plus all facilities for overnight or longer stays.

THE HIGH DESERT AND JOSHUA TREE NATIONAL MONUMENT

This is a pleasant and interesting one-day loop trip through the High Desert communities of Morongo Valley, Yucca Valley, Joshua Tree and Twenty-nine Palms and returning to Palm Desert by going through Joshua Tree National Monument.

Just north of Palm Desert on State 111 turn right on Bob Hope Drive which takes you past the Eisenhower Medical Center to the ramp over Interstate 10. Just over the ramp turn left where you will see the newly renovated Fort Oliver, former home of Harry Oliver, desert rat and teller of tall tales.

Follow the paved road which parallels Interstate

Continued on Page 40

THE STEADY hum of the diesel engine that pushed the large chartered bus along the highway south of the Salton Sea in California's Riverside County was like a sleep-inducing tonic.

This, combined with the early hour and the gentle rays of the early morning sun, just beginning to creep over the distant Chocolate Mountains, was enough to coax me into sort of a half sleep. It had rained the night before and the desert was alive with a sparkle not too frequently seen.

As I dozed, I caught bits of the running commentary presented by Lowell Weeks, general manager of the Coachella Valley County Water District. He had been born in Imperial Valley, and knew the area's history better than anyone I had ever met.

He was saying: "There used to be a small community east of here known as 17 Palms." He swung his arm to the west, taking in an area of desert that

rushed to join the foothills of the Santa Rosa Mountains.

"That community consisted of a number of far-flung ranches held together by a nail keg," he said. I came wide awake for the moment and gazed to the west, wondering what a nail keg had to do with a community.

Weeks explained: "When one of the ranchers was desperate enough to make the long ride into Indio after supplies, he would pick up mail for everyone and leave it in the nail keg on his way back home. Other ranchers would check the keg whenever they happened to ride by."

I thought Weeks' review of this small bit of history was interesting. I had never heard about 17 Palms before; but as the trip continued, I was to learn that Weeks knew a lot of things about this Southern California desert that I had not previously known.

As the bus hummed on, I couldn't help

but wonder about what life must have been like for those ranchers who depended on a nail keg to keep them in touch with the outside world.

The short distance into Indio, by today's standards, must have been quite a trip then. That was before the days of four-wheel-drive vehicles and recreation-seeking enthusiasts, who now gad about this whole area with ease.

Conditions had changed a lot. I live in Palm Desert in a comfortable three bedroom, air-conditioned home, equipped with electricity, running water, and a telephone. Those early ranchers, who eked out a living from the barren desert, had none of these things.

What was responsible for this change? At the turn of the century, few people lived anywhere on this expansive Southern California desert. Even fewer people came here seeking relaxation. What made the difference? Why was it now attrac-

As a result of the vast canal system, the once deserted wasteland of Imperial and Coachella Valleys have been changed into an agricultural empire. Opposite: The All-American Canal under a desert sky. Below: Coachella Canal and date groves.



Channels that Change

by Al Pearce

tive, and then so unattractive? Was it the Colorado River?

The bus I was riding had been chartered by the Coachella Valley County Water District to carry a few VIPs on an inspection tour of the facilities that provide water for this vast region, noted for its date palms, agriculture and recreation. Lowell Weeks was guiding the tour.

We had left the water district's offices in Coachella shortly before 7 A. M. As the sun climbed over the Chocolate Mountains and introduced a glimmering sparkle to the Salton Sea, we were traveling south on Highway 86. We had passed Travertine Rock, that famous land mark on the west side of the Sea, and was now rushing by Truckhaven.

I can remember when Truckhaven was no more than the name of a Jeep trail across the desert. There is a paved road there now that cuts through the lower finger of the Santa Rosa Mountains to connect with the Anza-Borrego State Park. It's a beautiful drive; passing by

favorite camping areas and interesting 4WD roads that drop from the plateau into the many canyons along the way.

One of these roads, just beyond a radio tower, leads to an old calcite mine where eager rockhounds still uncover crystals for their collections.

A little way beyond the Truckhaven trail, another highway joins 86, and cuts across the desert to Burro Bend, a popular area for campers and dune buggy enthusiasts.

It was below this turnoff that Weeks once again interrupted my thoughts:

"Captain Anza was saved here," he said, pointing towards the area known as San Sebastian Marsh. I knew the area well. It was the only place I was ever stuck so badly I couldn't get out without a tow truck.

Weeks was saying, "Anza and his party, which came this way in 1774 going to San Francisco, were desperately in need of water. They found it here, otherwise they probably wouldn't have made it."

Here was the question of water again. No matter how you look at the Southern California desert, the issue of water is always present. There seems to have always been either a critical shortage — or a critical over-abundance.

Driving east across Southeastern California, it's hard to imagine that this vast desert is so closely connected to the Colorado River. For thousands of years, the water rushing down the river from as far away as Wyoming has played an important part in shaping the Southern California desert.

The Colorado River has filled the Salton Sea Basin more than once. Just how many times is unknown. But it seems that all that dirt that came out of the Grand Canyon was deposited at the mouth of the river; often forming a dam, causing the water to back up and spill into the basin.

During the mid-1800s, when white man first became interested in this area, the

Continued on Page 42



The Antelope Ground Squirrel

by Jack C. Turner, Jr.

THE COLORADO Desert is home for a great diversity of specialized animal forms, of which the Antelope Ground Squirrel (*Ammospermophilus leucurus*) has perhaps one of the greatest distributions and abundance. Although the antelope ground squirrel has a fossorial habit (lives in a burrow) he is active during the daylight hours at all seasons, even during the summer months when most other closely related forms aestivate (summer hibernation) to avoid desert extremes.

This presents some rather intriguing

questions when one considers the nature of the desert's summer environment. The large amounts of solar energy, termed insolation, which is received accounts for the high temperatures and in part for the extreme aridity of the desert. Combined with low rainfall and a paucity of nutrients, it is no wonder that deserts are some of the most hostile of all terrestrial environments.

The antelope ground squirrel resembles the chipmunk in both personality and semblance, hence his common name "Desert Chipmunk," although they are not

closely related. This high-strung desert dweller is constantly in motion. His tail, which is held curved over his back exposing his white rump patch, twitches with his every move. It is his white rump patch which suggests the appearance of a pronghorn antelope for which he is named.

Summer conditions make rather severe demands on animals that live in the desert, and as such these animals must have some special physiological and behavioral adaptations to cope with these conditions. The antelope ground squirrel begins his day at sunrise and remains active, foraging for food until sunset. They are active even when air temperatures exceed 110 degrees Fahrenheit and the ground temperature rises above 160 degrees. His activity under such extreme heat has resulted in many scientific inquiries into how this small squirrel can survive.

Man can not allow his body temperature to rise. If it does he is said to have a "fever." The antelope ground squirrel allows his body temperature to rise with a concomitant rise in the environmental or ambient temperature. Dr. G. A. Bar-

tholomew, of the University of California at Los Angeles, has measured body temperatures as high as 110 degrees Fahrenheit with the ground squirrel exhibiting no discomfort. These body temperatures would in most cases be fatal to man! Despite his ability to "store" heat the ground squirrel must be able to rid himself of the accumulated body heat lest his temperature go too high, which would prove to be fatal.

This the animal does by flattening himself against a rock or the ground in a shaded area and thereby transfers some of his "extra" body heat to the ground. If conditions are too extreme, the squirrel retreats to his underground burrow where it is an average of only 70 degrees Fahrenheit and remains until his body temperature returns to normal. Dr. J. W. Hudson of the University of California at Los Angeles has taken antelope ground squirrels, whose body temperatures were 107 degrees, and placed them into a cool environment.

Within three minutes of being transferred from 104 degrees to an environment of 77 degrees their body temperatures had dropped to 100 degrees Fahrenheit. Because of the small size (about 90 grams) and extraordinary activity of this animal, he heats up rapidly and therefore must rid himself of the accumulated heat load frequently throughout the day.

Additionally, this squirrel can keep cool in another manner, but it is dangerously expensive and is used cautiously under conditions of extended exposure to the sun. It involves the use of saliva, which the squirrel drools and then spreads over his head, cooling being effected by evaporation. This method of cooling is expensive as it costs water, and water is present only in limited quantities in the desert. However, for this the antelope ground squirrel has another series of related adaptations.

The squirrel is exceedingly tolerant to dessication. He can survive for up to five weeks on a dry diet. However, if he is going to remain in a healthy condition he must have a source of water. This he finds in the food he eats. Being omnivorous, insects, succulent vegetation, seeds, even carrion number among his cuisine.

The water thus obtained is most efficiently utilized. Very little water is lost through the feces and urine. This desert squirrel can produce a urine almost three

Sunflower seeds are a favorite food of antelope ground squirrels as shown in these photos taken by Jack Pepper on the patio of his home in Palm Desert. Dove, quail and the "desert chipmunks" ignore each other (below) as they enjoy milo maize.



times as concentrated as that produced by man. But what is perhaps more impressive than this is the animal's ability to drink sea water and maintain himself in good condition! Drs. Bartholomew and Hudson have calculated that the antelope ground squirrel could drink water almost 1.4 times saltier than the ocean and still remain in good health! No other mammal researched thus far can equal this feat.

This squirrel's tolerance to such high concentrations of salt is of great importance. The desert has very little free or surface sources of water. Usually where

water does exist, it is a result of run-off where soil leaching has resulted in water which is highly mineralized. Being able to utilize these sources of water without debilitating effects is an obvious advantage.

The antelope ground squirrel enjoys a comfortable position within an otherwise uncomfortable environment. Through complementary combinations of behavior and physiology this little desert dweller has surmounted some of nature's worst conditions and done so with a finesse envied by even the camel, "the ship of the desert." □



The Ghosts of Tule Holes

by Roberta M. Starry

STRANGE things have happened in Death Valley and the Tule Holes area has had more than its share. A watering place known to the Indians long before white man tried to cross the strange valley, Tule Holes became famous more for death than life saved by its water.

It was here the ill-fated Bennett-Arcane party of '49ers fame paused for approximately a month. The water was deeply appreciated, but there was no food and death stalked the wagon train.

The Indians brought their old people here to survive as long as they could find roots or wildlife they could catch. Frail and toothless, they soon withered away.

Twenty-five years after the '49ers, Isadore Daunet with six other men attempted to cross the valley from the Panamint side enroute to Arizona. Daunet and a companion made it to the Tule water. Indians camping there went out and rescued two others, but two did not survive.

Later, Daunet returned to the swamp area and erected the Eagle Borax works, the first effort to extract ore from Death Valley. The product was too low grade to be worth the effort and the project closed after a few months.

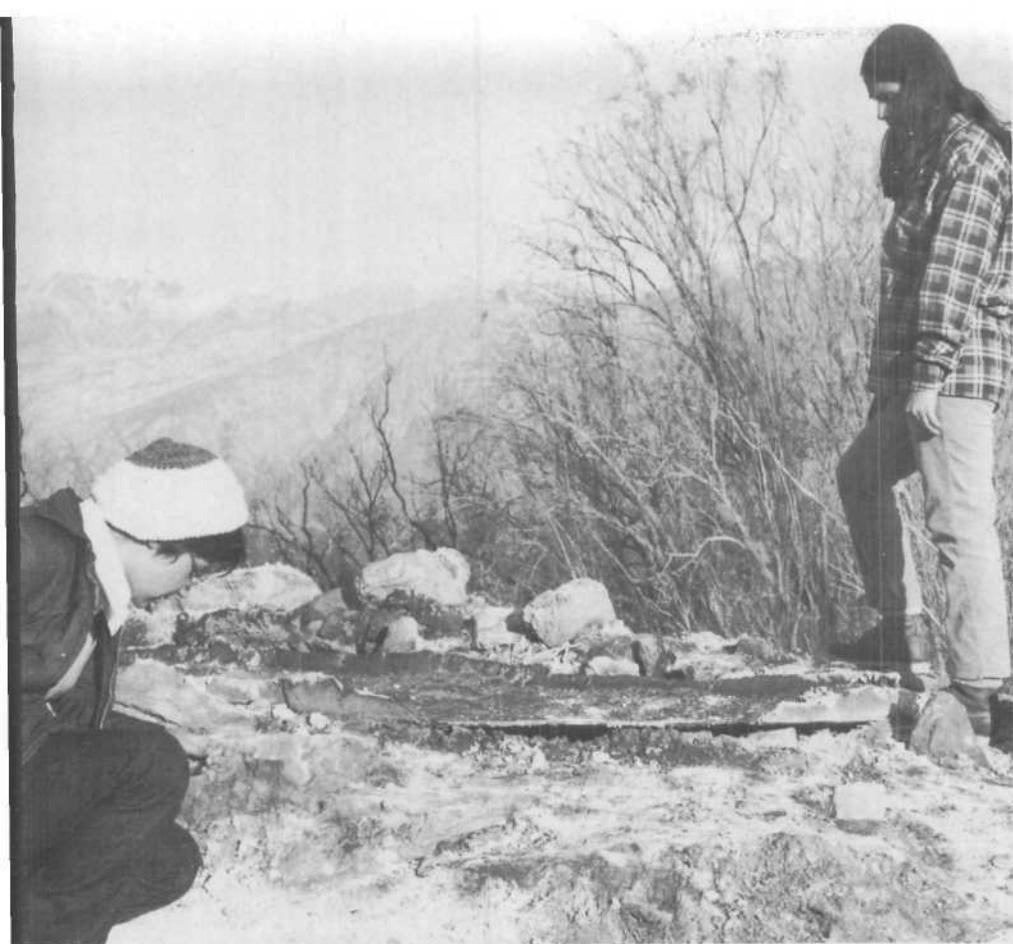
Better borax was found to the north and soon the 20-mule-team drivers developed the water holes for a regular rest stop and a place to replenish the water supply hauled behind the ore wagons. There were still very few white men around, but all knew and used every source of good water in the long valley.

In 1898, tragedy again struck the Tule Holes area. Jim Dayton, manager of the Furnace Creek Ranch and one of the long-time residents of the valley, was found dead under the shrubs near the springs.

His horses, tied to the wagon wheels, could not get to feed or water and they too perished.

The foregoing events have been recorded and told over and over in publications about Death Valley, but there is one of which no mention is made. The story came to light in the torn and weathered pages of an old newspaper: *The Bullfrog Miner*, Rhyolite, Nevada, March 29, 1907. The story stated: "On Saturday last, Henry Gould returned from Death Valley to the city and brought the news of what appears to be a horrible crime at Tule Holes about 60 miles southwest from Rhyolite."

The article went on to say that Gould's prospecting party stopped at Tule Holes



and startled a pack of coyotes digging in a sand mound. It was then they saw the partly uncovered body of a man of about 30 years of age. He was too well dressed to have been a miner or prospector and the remains indicated thievery. No identi-

fying article or jewelry were found on the body and the skull had been battered by a heavy instrument. The body had been buried in a shallow sandy grave; Gould's party buried it deep, covered with rocks to prevent animals digging and then erect-

ed a post at the head.

There were probably other deaths in various parts of the valley that were never known and some that were known were soon forgotten but the one at Tule Holes was brought to public attention in December of the same year.

The *Bullfrog Miner*, December 21, 1907 issue reads: "Dragged for 500 feet by the ghost of a murdered man in Death Valley is the experience of Bill Keyes, Walter Scott's (Death Valley Scotty) partner and right-hand man. Many stories have been printed regarding the spooks in this mysterious valley, but the horrible night spent in the vicinity of a lonely grave by Mr. Keyes is perhaps the most remarkable of them all."

The article went on to review the story of the discovery and condition of the body and to still guess whether the murder had been robbery or to settle some old score. Then it continued with the most recent event.

"Not long ago Bill Keyes, on one of his prospecting expeditions, had occasion to camp at Tule Hole near the grave of the murdered man. Mr. Keyes is not naturally superstitious, as the selection of a camping spot indicates. He knew the story of the murder, but he did not hesitate to pitch his tent near the grave.

Continued

Visitors examine ruins (above) of Eagle Borax Works near Tule Holes in Death Valley National Monument. Sign (right) explains why park officials are burning the tamarisk trees around the water holes. Photos by author.



Palm Desert Stationers

Office Supplies - Machines

ART MATERIALS
PICTURE FRAMING

73-739 Highway 111
Palm Desert, Calif.
Telephone 346-6042
FRANCIS P. MORLEY

"He spent a terrible night. He spread a tarpaulin on the ground and covered himself with blankets a prospector always carries with him. He heard all kinds of wierd noises, saw mysterious lights flit about the valley, and the air seemed full of ghostly folk. Sometimes he would catch the notes of a bullfrog when he knew there wasn't one within 300 miles. Then he would hear shrieks of a woman as if pursued by someone. The cries of little children would mingle with the moans.

"Mr. Keyes heard these things as he lay beneath the skies of Death Valley. But he became accustomed to the sounds and familiarity drove away fear. He slept. "When he awoke in the morning—and

this is the most remarkable point of the experience—he found he had been dragged bodily for 500 feet from the place he made camp. The bed was intact, just as it was when he retired."

After rehashing the weird evening, the article closed with Keyes own statement: "I am not naturally superstitious, but I am telling the truth when I say I was dragged across the wash for 500 feet, and that I heard the most unearthly and mysterious sounds which ever disturbed mortal ear. I am not attempting to account for the phenomena. All I know is that it happened."

From the known events that have transpired in the Tule Holes vicinity it is obvious that water and shade were the prime reasons for travelers to pause there. If the ghosts of those who found comfort or extinction came back to look at the old place today they would undoubtedly shake with ghostly anguish at what is happening to the shade trees at the old Eagle Borax Works site.

The gaunt skeletons of burned trees is a view that sends present day, live visitors to a large sign that reads "Closed Area, Experimental. Environmental-Historical Restoration Burn." In small print on a sheet of paper at the side it explains that for centuries migratory birds rested here each season, depending on the fresh water supply. Gradually the ponds dried up and Tamarisk trees took over. One tree can use 200 or more gallons of water per day and the surface water was consumed.

As the trees increased wildlife was deprived of water and the entire historical site was altered in appearance. In an effort to restore the appearance and bring water back for the birds and animals an experimental burn of ten acres was made in August 1971 and within eight weeks the water table had risen 1.2 feet and one pond reappeared.

Tule Hole's history and mystery makes it a most interesting area to visit. A good oil and graded road replaces the rock strewn, unmarked route of the early emigrant. At the junction near Furnace Creek Inn, take the Badwater Road south for seven miles. Just past Mushroom Rock go right at the Y for 10 miles. Tule Holes (or Tule Springs) is on the left side of the main road as are the graves and monument to Shorty Harris and Jim Dayton; a half mile farther is the ruins of the Eagle Borax Works. □

COLOSSAL CAVE

22 MILES EAST OF TUCSON, ARIZ. ON I-10



In the heart of

DEATH VALLEY

Historic
STOVE PIPE WELLS VILLAGE

Centrally located as a base from which to visit Death Valley's numerous points of interest. Stay with us and enjoy comfort and friendly service as you tour the area.

Luxurious new units Beautiful new dining room, cocktail lounge
Gift Shop Heated Pool General Store Service Station
Landing Strip Campground

WRITE OR CALL:

STOVE PIPE WELLS VILLAGE

Death Valley, California 92328

Area Code 714 Stove Pipe Wells #1 Toll Station

DESERT LOVE STORY

Continued from Page 19

maps are the 15-minute topographic quadrangles put out by the government. The Carrizo Mountain quadrangle shows most of the badland area.

With Palm Spring as a base, there are dozens of canyons to explore on foot or by vehicle. A series of canyons running northwest into the badlands begin with June Wash on the west and include View of the Badlands Wash, Arroyo Hueso, Arroyo Tapiado, and the granddaddy, Arroyo Seco Del Diablo. All of these washes can be explored for several miles by vehicle and some are connected by jeep trails, allowing for loop trips.

On a recent visit we made an interesting loop tour that we feel will appeal to any desert traveler. During the day we explored the dark, cool depths of a mud cave, hiked over rugged fossil-laden hills, laughed at strange rock formations, enjoyed lunch under a shady smoke tree and were swallowed in the shadows of high-walled canyons.

We began at Palm Spring where we had camped the night before. From here we headed east along the old stage route which follows Vallecito Creek. Arroyo Tapiado spills into the Vallecito about two-and-a-half miles east of Palm Spring. There is a large state park sign here, so it's not easy to get lost.

Your first drive up Tapiado will be an adventure you won't forget. The wide, sandy wash soon narrows to only a hundred feet wide or less in some places and powdery mudwalls grow to several hundred feet tall. These canyons are a study of perfection in erosion. Oddball shapes have been carved by wind and water. Little caves—one shaped like a big keyhole—dot the cliff walls.

Going up the wash for a few miles, keep an eye out to the right for a large yawning hole in the cliff. This is a mud cave that snakes back into the canyon wall for a half-mile or more.

Tapiado can be traveled by vehicle for 10 miles, but at about seven miles there is a park trail marker on the right and a rough trail leading up to a mesa and into Arroyo Seco Del Diablo. Following this trail, you will bump along on top of the badlands for several miles, eventually dropping down again into Diablo.

If you continue down canyon to the south when you enter Diablo, you will soon notice a trail marker on the left. This trail leads to a place known as the "dropoff." Here you get a fantastic view of the Split-Mountain-Fish Creek area to the north and the badlands are rolled out below you.

If you take this trail on over the drop-off you will come out at Fish Creek. This is a rugged route, however, and I wouldn't recommend it for larger rigs or inexperienced drivers. At times the dropoff is a one-way route only, since loose sand can prevent vehicles from coming up the steep slide. If you are camped at Palm Spring, it's about a 70-mile drive back by highway once you have dropped over the dropoff.

On this trip we didn't continue beyond the dropoff and returned to Diablo and followed it south until it joined Vallecito Creek. From here it was only a short four miles or so back to Palm Spring.

As you travel these eroded corridors through the Carrizo Badlands, remember that these were once the routes used by Indians and prospectors who long ago left their mark upon the land. Only a few years ago a huge earthen jug made by Indian hands was found hidden in a small cave in one of these canyons. This large olla is now on display at the Anza-Borrego Headquarters in Borrego Springs.

There are other benefits to exploring this interesting part of Anza-Borrego. One of them is the chance that you might run into people like ranger George Leetch.

For many years, George was the ranger at the Fish Creek outpost to the north and he made many friends and opened many eyes to desert wonders while there. Recently George returned to Anza-Borrego after doing duty at Torrey Pines State Park.

George now patrols the southern portion of Anza-Borrego, and you'll find you've had a more pleasant trip if you cross tracks with him.

So go out and enjoy the Carrizo Badlands. But watch out if you have other obligations. This area can grip you in a spell of infatuation that may lead to love. But then there's enough here for everyone to love. □



FUN and PROFIT
WITH ALL NEW

"COMPASS" Metal Detectors

FREE CATALOG

FIND MORE TREASURES
WHERE OTHERS HAVE MISSED!

TRY THE REVOLUTIONARY ALL NEW
COMPASS 'YUKON'
METAL-MINERAL DETECTORS

PROFESSIONAL
MODEL 77-1B \$249.50
INDUCTION BALANCE DESIGN

OTHERS FROM \$124.50

COMPASS EXCLUSIVES:

WIDE-SCAN SEARCH LOOP!
GROUND CONDITION ADJUSTMENT!

14-Day
Money-
Back
Guarantee

RENTALS WITH OPTION TO BUY

Prospecting and Hiking Equipment
Books — Topo Maps

JACOBSEN SUPPLIERS

9322 California Ave., South Gate, Calif.
213 569-8041 90280

DEALER INQUIRIES INVITED



*"Just beyond
Palm Springs
toward La Quinta"*

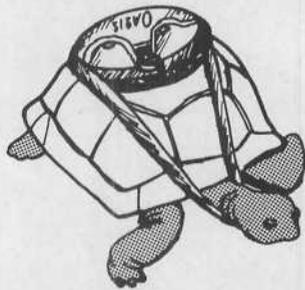
- two gourmet dining rooms
- entertainment & dancing
- 225 air conditioned rooms
- three pools, sauna baths
- lush garden setting
- Seminar Pavilion for groups

**ERAWAN
GARDEN HOTEL**



*"Just beyond Palm Springs,
toward La Quinta"*
INDIAN WELLS, Calif. 92260
(714) 346-8021

A Development of
Fritz B. Burns & Associates



"A drink from my OASIS Canteen hurries me along."



1 1/2 QUART

FOR
SPORTSMAN
CAMPER
FARMER
RANCHER
LOGGER
TURTLES

Oasis Canteens come in 5 sizes, 3 styles and in 2 materials . . . 12 models from which to choose . . . a canteen to suit every need. Priced as low as \$2.59.



If not available at your local Sporting Goods, Hardware or Department Stores write for FREE Catalog and Mail Order Information.

OASIS CANTEENS

MANUFACTURED BY

M. E. SHAW & SONS

P.O. BOX 31428, LOS ANGELES, CALIF. 90031



A Joshua tree is silhouetted against the sky as the sun sets in the High Desert

LAND OF CONTRASTS

Continued from Page 31

10 to the turnoff to Desert Hot Springs, world famous spa whose hot baths attract people from throughout the world. From Desert Hot Springs take Pierson Boulevard west which connects with State 62. Turn right and head for the High Desert Country.

There is a marked difference between the desert plants you see along the sea level Low Desert and those in the High Desert. Joshua trees, yuccas and cholla grow among the giant sandstone formations.

Along the way there are many places of interest. At the Union Service Station in Yucca Valley, take the paved road north for 10 miles and visit Pioneer

Town. It looks like an old Wild West community, but it is actually a movie set where many shoot-outs were made.

From Pioneer Town, four-wheel-vehicles can take the mountain road through the Rose Mine district to Big Bear Lake. This is NOT for passenger cars.

A few blocks north of the town of Yucca Valley is Desert Christ Park where an artist has created life-size figures of The Last Supper and other Biblical settings.

Six miles from Yucca Valley is the community of Joshua Tree and the first entrance to Joshua Tree National Monument. The Monument has many overnight camp sites and abounds in spectacular scenery and giant sandstone boulders which make it a favorite family area for kids who love to scramble over the cliffs.

The eastern entrance to the Joshua Tree National Monument is at Twentynine Palms. Also east of Twentynine Palms is the Virginia Dale mining district where weekend prospectors look for gold and gem stones. (When prospecting this area be sure you are out of the Monument and not trespassing on private property.)

Whether entering the Monument from Joshua Tree or Twentynine Palms be sure to take the paved road up to Salton View (also known as Keyes Point), where, at an elevation of 5,000 feet, you can overlook the desert floor below and the Salton Sea in the background. It is a breath-taking panoramic view extending for many miles.

To complete the loop trip follow the Monument signs to the paved road south to Cottonwood Springs and then to Interstate 10. Turn right on the freeway and it is 30 miles back to Palm Desert.

These are only a few of the many interesting trips and things to see in the eastern half of Riverside County. Whether you have only a few hours, a weekend, or several days, you will find adventure, beauty and peace in this land of contrasts



HAPPY SIGN OF PROGRESS

When CVCWD pipeline crews are seen at work as in the above photo, you can be sure new facilities are being readied so more families may establish their homes and begin enjoying the happy, contented existence of our great desert empire. CVCWD now serves pure, urban water to close to 10,000 homes and businesses.

Domestic Water Division

COACHELLA VALLEY COUNTY WATER DISTRICT

Your Local Governmental Agency Active

In Six Related Fields of Water Service

P.O. Box 1058, Coachella, Calif. 92236

Office: Southern Edge of Coachella — 398-2651



Roadrunner Pin

Sterling silver with genuine turquoise eye, about 3" long. \$10.00.

Calif. residents add 5% sales tax

Send check or money order to:

ALLEN TOMLINSON

P. O. Box 925, Palmdale, Calif. 93550

Recipes for M'Lady

CARROT-DATE COOKIES

- 1/2 cup chopped dates
- 1/2 cup shredded carrots
- 1/2 cup boiling water
- 1/2 cup shortening
- 1 cup brown sugar
- 2 eggs (beaten)
- 1 1/2 cups all purpose flour
- 1/2 teaspoon salt
- 1 teaspoon lemon extract
- 1/2 cup chopped nuts (optional)

Directions: Pour boiling water over dates—soak 5 minutes and drain.

Cream shortening and sugar, add eggs and extract. Add sifted dry ingredients, dates and nuts and carrots.

Drop by spoonful onto greased cookie sheet. Bake at 400 degrees 10 minutes.

DATE-CHEESE LOAF

- 1 cup dates (chopped)
 - 1/2 cup brown sugar
 - 1/4 cup butter (or oleo)
 - 3/4 cup boiling water
- (Pouring boiling water over the sugar, dates and butter and let set until cool.)
- Add 1 beaten egg.
 - Add flavoring: 2 teaspoons rum or cherry maraschino juice.
 - Add dry ingredients (sifted)
 - 1 3/4 cups all purpose flour
 - 1 teaspoon soda
 - 3/4 teaspoon salt.
 - Add 1/2 cup maraschino cherries and 1/2 cup chopped nuts.
- Bake in loaf pan 1 hour at 350 degrees. Wrapped in tinfoil, keeps a long time in refrigerator.

LEMON-DATE BREAD

- 1/2 cup shortening
 - 1 cup sugar
 - 2 eggs
 - 1/2 cup milk
- Grated rind and juice of 1 lemon
- 1 1/2 cups all purpose flour
 - 1 teaspoon baking powder
 - 1 teaspoon salt
 - 1/2 cup chopped nuts
 - 1/2 cup chopped dates

Directions: Cream shortening and sugar, add 2 beaten eggs. Add grated rind and juice of 1 lemon.

Add sifted dry ingredients alternately with 1/2 cup milk. Fold in nuts and dates.

Bake 1 hour at 350 degrees in 5 x 9 loaf pan.

While still warm, glaze with 1/4 cup sugar and 2 tablespoons lemon juice.

(Wrapped in tin foil, this bread will keep in the refrigerator for a long time.)

WE SPECIALIZE IN
RARE AND EXOTIC DATES . . .
AND, COACHELLA VALLEY
CITRUS

BE SURE AND VISIT US!

O'Henry's FARM

Blythe Intersection, Hwy. 86
Box 545, Indio, California 92201
Telephone (714) 347-1828

★ WE SHIP ★



"WATCH FOR THE RED BARN OF QUALITY"

Riverside County's
National
Date Festival
INDIO, CALIFORNIA

FEB. 16 thru FEB. 25

(Friday) (Sunday)
10 Exciting Days & Nights

STREET PARADE

Monday, Feb. 19 • 10:30 a.m.
(Washington's Birthday Holiday)

SPECTACULAR EXHIBITS
Date-Citrus Feature Exhibits
Big Gem & Mineral Show
Fine Arts—Photography
Domestic Arts—Jr. Livestock
& Much, Much More!

ARABIAN NIGHTS PAGEANT

Southland's Famed Outdoor Show
6:45 nitely • 2 Shows Sat.

Every afternoon • Main Arena
CAMEL & OSTRICH RACES
Wild! Exciting! Funny!

**NATIONAL HORSE
SHOW**
Daily 1 p.m.

BIG FREE STAGE SHOWS

Dates
That
Delight

74-774 Highway 111
Indian Wells, California

Write for brochure

Indian Wells Date Garden

P.O. BOX 107
PALM DESERT, CALIFORNIA 92260



DON'T MISS IT!
"ROMANCE AND SEX LIFE
OF THE DATE"
FREE Admission

108 Comfortable Theatre Seats
Continuous Showing, 8 a.m. to 6 p.m.

Write for brochures

80-225 Highway 111, Indio, Calif 92201
"The Date Garden Highway"

Telephone 714 347-0996

SHIELDS DATE GARDENS

Established 1924

CHANNELS THAT CHANGE

Continued from Page 33

Colorado River was dumping into the Gulf of California, but there was a lake in the basin; some writers of that period claim there were as many as seven lakes. One was named Lake Cahuilla by the Indians.

Weeks said that during the first few months of 1900, there were few whites living in Imperial Valley. It was during that year that the first attempt was made to bring Colorado River water to the vast Southern California desert.

A diversion dam was built near the New River where it joins the Colorado. When the gates were lifted it's hard to say which came the fastest, water or people. They both flooded the desert.

Historic photo shows inmates of the Yuma Prison rebuilding walls of buildings destroyed by the flooding Colorado River.

That first diversion dam is gone. It was wiped out when the Colorado swept over it and flooded the Salton Sea Basin during 1905-1907. But a new dam was constructed and it has become something of a landmark. It is located a few miles west of the river by Yuma, Arizona.

As our bus pulled up to the dam during the tour, I noticed a number of campers strung out under a myriad of tamarisk trees. It looked inviting. Weeks described the area as a popular camping spot because of its proximity to the river. The fishing



around this part of the Colorado is generally good to excellent.

And, there is always a lot to do in this area. Yuma, only a few minutes drive away, is the home of the old Territorial Prison made famous by its graveyard. The prison is now a museum and well worth a couple of hours of time.

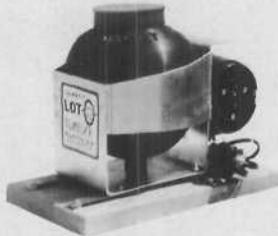
It was from the Yuma area that the first explorations of the Colorado River got underway. Lt. Joseph C. Ives made his now famous up-river run from here. A journey that prompted him to write:

"The land is fit for neither man nor beast." He went on to say, in brief, let's not spend any money here. The whole area is worthless and will never benefit man. Just how wrong he was became all too evident when our bus reached Imperial Dam, about 25 miles north of Yuma.

The area around Imperial Dam is now a recreational paradise—and a monument to man's ingenuity and determination. Here are the controls that make another flood of the Salton Sea Basin impossible. It is from here that the water that fills the vast All American and Coachella Canals is controlled.

These facilities are open to the public by request; that is, anyone can knock on the door of the offices near the dam and get a cook's tour, complete with all the trimmings.

CGI Lot-O-Tumbler



This tumbler works on the vibrator principle as opposed to the current rotary principle.

CUT YOUR TUMBLING TIME FROM 4 WEEKS TO 2 WEEKS! (depending upon materials used)

\$34⁵⁰ PLUS POSTAGE
(Shipping weight, 10 lbs.)

COLORADO GEOLOGICAL INDUSTRIES, INC.
Dept. D
5818 E. Colfax Ave., Denver, Colo. 80220

Westward Ho! A Way To Go!

For a golf match you'll always remember in a setting you'll never forget, try us! Call 714-347-0651 for a starting time.

A Desert Golfers Special!

A limited number of Charter Memberships are available.

Several different types of memberships. Write for an informative fact sheet today.



Westward Ho Country Club

46080 JEFFERSON STREET

INDIO, CALIFORNIA 92201



During the winter months, when snow reaches eye level up north and the winds pass across the North Pole, thousands of residents from the "brrrr" country jump in their recreational vehicles and rush south to find a more friendly sun.

Many of these visitors can be found in their campers and trailers around the Imperial Dam. They come here by the hundreds and are parked everywhere. They are fishing, water skiing, basking in the sun, or hunting for rare rocks and minerals that are seemingly commonplace here.

Squaw Lake, a few miles north of the dam, is as fine a lake as can be found anywhere. Here, the solitude-seeking camper will find his every wish fulfilled. The lake creeps in and out of numerous coves which seems to have been designed with the camper in mind.

On the return trip, Lowell Weeks talked a lot about water. If the close connection between the Salton Sea Basin and the Colorado River had not already been made evident, it soon was. Everywhere we looked, there was a patch of irrigated land emphasized in its particular attraction by surrounding stretches of desert and drought loving plants.

On the way to Imperial Dam, we traveled Highway 86 on the south side of the sea; going home, we took Highway 111, on the north side of the sea. Actually, a

trip around the sea by itself, would be an excellent way to spend a weekend. There's a lot of history in this area.

Near Mecca, Weeks said that, in 1906, the residents of Mecca held their annual Easter celebration, thinking it would be the last Easter they would spend in their homes. Flood waters were lapping at their doorsteps so to speak. Actually, the waters reached the packing shed on the south side of town, Weeks said.

However, they were fortunate; engineers finally stemmed the flow of the Colorado River, and the flood waters began to recede in 1907.

On the way home, we took a short side trip to inspect a portion of the Coachella Canal. A dirt road runs the length of the Canal, and it can be easily traveled in any type of vehicle. The canal traverses some of the most scenic and geologically interesting areas found anywhere in Southern California.

Due east of Mecca, the Mecca Hills are a geological phenomena. Painted Canyon brightens the area with the colors of the rainbow; particularly towards evening when the late sun strikes the area from a low angle and sets it aglow.

Another road, which turns into the mountains from the Canal road, about five miles south of Box Canyon, leads a winding path back into the Orocochia Mountains and Hidden Springs. Here, like a surprise, a stand of palm trees jumps into sight around a small year around spring. On a quiet morning, or late evening, a silent spectator can watch the desert animals come to the spring for a drink; a drink that didn't come from the Colorado River.

I've been running around the Southern California desert for more than 20 years. All this time, I've been aware of the canals that snake across the desert, and I knew the Colorado was the artery that kept the desert alive; but it wasn't until this trip with the Coachella Valley County Water District, that I gave the canals and the river much significance.

Now, when I pass one of the canals, I think of them as the aorta; and, when I have time, I like to drive to a high spot and look across the desert and wonder what it would be like if, during the years gone by, the mighty Colorado River had behaved as a river should.

And, I wonder what it would be like if there had not been a Colorado River. □

Coachella Valley's Most Complete Photo Center

Everything For Your Camera Needs

On Scenic Highway 111 — West Indio

JOHNSON PHOTO CAMERA SHOP

81-654 Highway 111 Indio, Calif. 92201
Phone DI 7-3774

ZIP CODE YOUR MAIL

NEW! Stainless Steel Water Purifier Distiller

MAKE THE PUREST



*Drinking
Water*

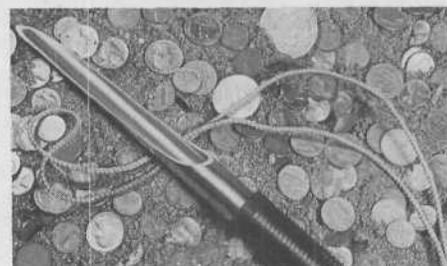
- Use any heat source
- No plumbing hook-up

PENNIES PER GALLON FOR PURE WATER

Mini-Aqua SS-4 Purifier Distiller removes chlorine, fluoride, iron, pesticides, sulphates, dirt, salt, calcium, alum, and all taste spoiling pollutants. Improves beverage and food flavor. *5-yr. warranty. Other types of home water distillers available. Write for free information.

UNITED VITO-WAY

Seattle office: Dept. D-2
Northrup Industrial Park
Box 1705, Bellevue, Wash. 98009



COIN DIGGER DESIGNED BY A TREASURE HUNTER!

"THE PROSPECTOR"...a digging tool that should be readily accepted by park attendants—actually used in parks and playgrounds by a coin-shooting treasure hunter using a metal detector. It probes neatly into lawns and recovers lost coins and jewelry without tearing up the turf or leaving holes!

"THE PROSPECTOR" is light (only 5 ounces)...but very rugged. It can probe deep into solid sod or hard packed dirt and it scarcely leaves a mark. Machined from a tough aluminum alloy. Its metal hardness is less than most coins so coin damage is minimized when contact is made. A foot long, gold anodized finish, and it comes with an elastic cord for belt fastening (can't lose it). The penetrating point is self-sharpening through repeated usage. And when you're not finding coins, it's great for digging weeds!

DON'T SEND YOUR METAL DETECTOR OUT WITHOUT "THE PROSPECTOR"!

CHECK OR MONEY ORDER—POSTPAID **\$4.95**

ENGINEERED THINGS

P.O. BOX 10022 • PORTLAND, OREGON 97210

Selected Reading from Desert

ROAD MAP TO CALIFORNIA'S LOST MINES AND BURIED TREASURES and ROADMAP TO CALIFORNIA'S PIONEER TOWNS, GHOST TOWNS AND MINING CAMPS compiled by Varna Enterprises. Both roadmaps are 38" by 25" and scaled. Southern California on one side and Northern California on the other. Both contain detailed location of place names, many of which are not on regular maps. Treasure Map is \$4.00 and Ghost Town Map is \$2.95. When ordering, be certain to state which map, or both.

SAN BERNARDINO MOUNTAIN TRAILS by John W. Robinson. Easy one-day and more rugged hiking trips into the historic mountains. The 100 hiking trails are described in detail and illustrated so you will not get lost. Heavy paperback, 257 pages, \$4.95.

OREGON COAST with photos by Ray Atkeson and text by Archie Satterfield. The finest collection of four-color photographs of the magnificent shoreline ever presented. Excellent historic text. Paper, 124 pages. \$19.00 until January, 1973. Large 11x14 format, hardcover, heavy slick then \$22.00.

GOLDEN MIRAGES by Philip A. Bailey. Out-of-print for more than 20 years, this was a collector's item. A valuable book for lost mines and buried treasure buffs, it is beautifully written and gives first-hand interviews with old-timers long since passed away. Excellent for research and fascinating for arm-chair readers. Hardcover, illustrated, 353 pages, \$9.95.

TIMBERLINE ANCIENTS with photos by David Muench and text by Darwin Lambert. Bristlecone pines are the oldest living trees on earth. Photographer David Muench brings them to life in all their fascinating forms, and Lambert's prose is like poetry. One of the most beautiful pictorials ever published. An ideal gift. Large 11x14 format, hardcover, heavy slick paper, 128 four-color photographs, 125 pages. \$19.00 until January, 1973, then \$22.00.



DESERT EDITOR by J. Wilson McKinney. Known by his many friends throughout the West as "Mr. Desert" the late Randall Henderson founded the Desert Magazine 35 years ago and for more than 20 years was editor and publisher. His former business partner and long-time friend, J. Wilson McKinney has written a book about Henderson, Desert Magazine and the growth of Palm Desert since Henderson moved the magazine to the area in 1948. This is a story about a man, his dream, and how he made it a reality. Hardcover, illustrated, 188 pages, \$7.95.

30,000 MILES IN MEXICO by Nell Murbarger. Joyous adventures of a trip by pick-up camper made by two women from Tijuana to Guatemala. Folksy and entertaining, as well as instructive to others who might make the trip. Hardcover, 309 pages, \$6.00.

MINES OF DEATH VALLEY by L. Burr Belden. About fabulous bonanzas, prospectors and lost mines. Paperback, \$1.95.

LET'S GO PROSPECTING by Edward Arthur. Facts and how-to-do-it on prospecting are presented by the author who has spent 30 years searching for gems and minerals in California. For those who think there are no more valuables left in California, they will find a new field in this informative book. Includes marketing data, maps, potential buyers for discoveries. Large 8x10 format, illustrated, heavy paperback, 84 pages, \$3.95.



MOCKEL'S DESERT FLOWER BOOK by Henry and Beverly Möckel. The well-known painter of desert wildflowers has combined his four-color sketches and black and white photographs to describe in detail so the layman can easily identify wildflowers, both large and small. Microscopic detail makes this an outstanding book for identification. Special compressed fiber cover which will not stain. 54 full-color illustrations with 72 life-size drawings and 39 photographs, 316 pages, \$5.95.

DESERT GEM TRAILS by Mary Frances Strong. One of the most popular and authoritative books on the Mojave and Colorado Deserts has been completely revised and updated. Detailed mileage maps, photographs, history, landmarks, etc. make this book tops in its field. Heavy slick paperback, 80 pages, \$2.00.

EXPLORING CALIFORNIA'S BYWAYS by Russ Leadabrand. Excellent travel guides to passenger car areas by a veteran explorer and popular writer. All books are heavy, slick paperback with detailed maps, illustrations and historical background, 180 pages and \$1.95 each. **STATE WHICH VOLUME WHEN ORDERING.** Vol. 1, Kings Canyon to Mexican Border; 2, In and Around Los Angeles; 3, Desert Country; 4, Mountain Country.

OLD MINES AND GHOST CAMPS OF NEW MEXICO by Fayette Jones. Reprinted from New Mexico Mines and Minerals, 1905. Covers mines and camps up to that date only. Descriptive landmarks make it easy for a reader to identify locations. Illustrated with photos and digrams. Paperback, 214 pages, \$4.00.

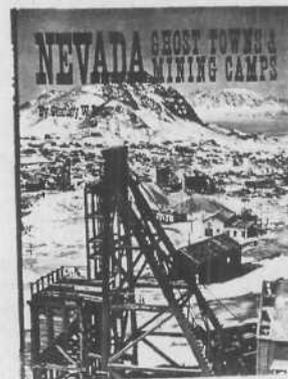
GHOST TOWNS OF THE COLORADO ROCKIES by Robert L. Brown. Written by the author of Jeep Trails to Colorado Ghost Towns this book deals with ghost towns accessible by passenger car. Gives directions and maps for finding towns along with historical backgrounds. Hardcover, 401 pages, \$6.95.

THE GREAT SOUTHWEST by Eino Bakker and Richard G. Lillard. The publishers of American West commissioned the authors to capture the past and present panorama of the Great Southwest. Through text and photographs (both black and white and color) they have succeeded in accomplishing this monumental task. Large 9 x 11 format, hardcover, heavy paper stock, maps and index. The best comprehensive book on the Great Southwest to date. \$17.50.

THE MIGHTY SIERRA by Paul Webster. Subtitled "A Portrait of a Mountain World", This is a dramatic story of the geology of the Sierra Nevada and of the people—both of historic and present age—who have lived and died in the mountain world. Includes a special Travel Guide, glossary and bibliography. Seventy 4-color and 90 black and white photographs plus maps and illustrations. Large format, hardcover, 288 pages, \$13.95 until Dec. 31—then \$17.50.

CALIFORNIA by David Muench and Ray Atkeson. Two of the West's greatest color photographers have presented their finest works to create the vibrations of the oceans, lakes, mountains and deserts of California. Their photographic presentations, combined with the moving text of David Toll, makes this a classic in Western Americana. Large 11x14 format, heavy slick paper, hardcover, 200 4-color photographs, 186 pages, \$25.00.

NAVAJO RUGS, PAST, PRESENT AND FUTURE by Gilbert S. Maxwell. Concerns the history, legends and descriptions of Navajo rugs. Full color photos. Paper, \$2.50.



NEVADA GHOST TOWNS AND MINING CAMPS by Stanley W. Paher. Covering all of Nevada's 17 counties, Paher has documented 575 mining camps, many of which have been erased from the earth. The book contains the greatest and most complete collection of historic photographs of Nevada ever published. This, coupled with his excellent writing and map, creates a book of lasting value. Large 9x11 format, 700 photographs, hardcover, 492 pages, \$15.00.

LOST MINES OF THE GREAT SOUTHWEST by John D. Mitchell. The first of Mitchell's lost mine books is now available after having been out of print for years. Reproduced from the original copy and containing 54 articles based on accounts from people Mitchell interviewed. He spent his entire adult life investigating reports and legends of lost mines and treasures of the Southwest. Hardcover, illustrated, 175 pages, \$7.50.

HELLDORADO by William Breakenridge. One of the most famous law enforcement officers of the Old West describes his life and gives first-hand accounts of the famous outlaws and lawmen he knew. First published in 1928 and long out-of-print, now available. Hardcover, illustrated, 1883 map of Arizona Territory, 255 pages, \$7.50.

Important Notice

Magazine Gift and Book Shop

GOLD AND SILVER IN THE WEST by T. H. Watkins. The author brings together for the first time the entire story of gold and silver mining in the West. It tells of conquistadores chasing myths in Old Mexico, gold and silver strikes in the West, Alaska, Mexico and Canada, the rise and fall of mining ventures, promotional schemes and today's operations. Hardbound, large format, 212 illustrations (75 in 4-color) 288 pages, \$17.50.

FANTASIES OF GOLD by E. B. Sayles. During his search for archeological finds for more than 30 years, the author was exposed to the rumors and legends of lost gold and treasures. After his retirement as curator of the Arizona State Museum, he classified and delved into these still unsolved mysteries. An interesting and informative book on lost bonanzas and legends, many of which have never been published. Hardcover, well illustrated, 135 pages, \$6.50.

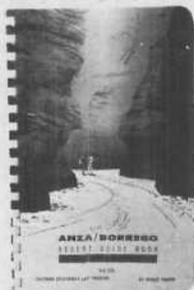
LOST DESERT BONANZAS by Eugene Conrotto. Brief resumes of lost mine articles printed in back issues of DESERT Magazine, by a former editor. Hardcover, 278 pages. \$7.50.

BICYCLE TRAILS OF SOUTHERN CALIFORNIA by David Kurk and Robert Miller. Sixty-nine trails, including sidetrips, ranging from three to fifty miles in both rural and urban areas. Illustrated, maps, terrain description, paperback, 128 pages, \$1.95.

NORTHWESTERN ARIZONA GHOST TOWNS by Stanley W. Paher. Directions to and history about 23 of Arizona's most famous ghost towns. Historical photographs and artist sketches enhance editorial content. Large, 11x14 format, slick paperback, 48 pages, \$2.95.

A FIELD GUIDE TO ROCKS AND MINERALS by Frederick H. Pough. Authoritative guide to identification of rocks and minerals. Experts recommend this for all amateurs as one of the best 3rd edition with many new color illustrations. Hardcover. \$5.95.

BARBED WIRE HANDBOOK by Thomas E. Turner. Contains 418 different kinds of barbed wire and associated items, described and illustrated with line drawings. Current value prices. Paperback, 102 pages \$3.95.



ANZA-BORREGO DESERT GUIDE by Horace Parker. Third edition of this well-illustrated and documented book is enlarged considerably. Tops among guidebooks, it is equally recommended for research material in an area that was crossed by Anza, Kit Carson, the Mormon Battalion, '49ers, Railroad Survey parties, Pegleg Smith, the Jackass Mail, Butterfield Stage, and today's adventurous tourists. 139 pages, cardboard cover, \$3.50.

LOST MINES & BURIED TREASURES ALONG THE OLD FRONTIER by John D. Mitchell. The second of Mitchell's books on lost mines which was out-of-print for many years is available again. Many of these appeared in DESERT Magazine years ago and these issues are no longer available. New readers will want to read these. Contains the original map first published with the book and one pinpointing the areas of lost mines. Mitchell's personal research and investigation has gone into the book. Hardcover, 240 pages, \$7.50.



SOURDOUGH COOKBOOK by Don and Myrtle Holm. How to make a sourdough starter and many dozens of sourdough recipes, plus amusing anecdotes by the authors of the popular *Old Fashioned Dutch Oven Cookbook*. A new experience in culinary adventures. Paperback, 136 slick pages, illustrated, \$3.95.

GHOST TOWN BOTTLE PRICE GUIDE by Wes and Ruby Bressie. A new and revised edition of their popular bottle book, first published in 1964. New section on Oriental relics, plus up-to-date values of bottles. Slick, paperback, illustrated, 124 pages, \$2.95.

100 DESERT WILDFLOWERS by Natt Dodge. Each flower is illustrated with a 4-color photograph and described in detail, where found, blooming period, etc. Habitats from sea level to 4,000 feet. Slick paperback, 64 pages, \$2.00.

HOW TO COLLECT ANTIQUE BOTTLES by John C. Tibbitts. A fascinating insight of early America as seen through the eyes of the medicine companies and their advertising almanacs. Excellent book for avid bottle collectors and those just starting. Also includes chapters on collecting, locations and care of bottles. Heavy, slick paperback, well illustrated, 118 pages, \$4.00.

ON DESERT TRAILS by Randall Henderson, founder and publisher of Desert Magazine for 23 years. One of the first good writers to reveal the beauty of the mysterious desert areas. Henderson's experiences, combined with his comments on the desert of yesterday and today, make this a MUST for those who really want to understand the desert. 375 pages, illustrated. Hardcover. \$6.95.

SELDOM SEEN SLIM by Tom Murray. Profiles and vignettes of the colorful "single blanket jackass prospectors" who lived and died as they looked for gold and silver in Death Valley. Slick paperback, exclusive photos of the old-timers, 65 pages, \$3.00.

LOST LEGENDS OF THE WEST by Brad Williams and Choral Pepper. The authors examine the "lore, legends, characters and myths that grew out of the Old West" in a sequel to their popular first book, *The Mysterious West*. Included among the more than 20 "lost legends" are such intriguing subjects as lost bones, lost ladies, lost towns, and lost diamonds. Hardcover, illustrated, 192 pages, \$5.95.

NEW MEXICO PLACE NAMES edited by T. M. Pearce. Lists and gives a concise history of the places, towns, former sites, mountains, mesas, rivers, etc., in New Mexico, including those settled by the early Spaniards. Good for treasure hunters, bottle collectors and history buffs. Paperback, 187 pages with more than 5000 names, \$2.45.

GHOSTS OF THE GLORY TRAIL by Nell Murbarger. A pioneer of the ghost town explorers and writers, Miss Murbarger's followers will be glad to know this book is once again in print. First published in 1956, it is now in its seventh edition. The fast-moving chronicle is a result of personal interviews of old-timers who are no longer here to tell their tales. Hardcover, illustrated, 291 pages, \$7.00.

DESERT OVERVIEW MAPS
Using topographic maps as basic underlays, Wes has compiled two excellent detailed maps for back country explorers of the Mojave and Colorado Deserts. Maps show highways, gravel roads, jeep trails plus historic routes and sites, old wells, which are not on modern-day maps, plus ghost towns, Indian sites, etc. Mojave Desert Overview covers from U.S. 395 at Little Lake to Boulder City, Nevada, to Parker Dam to Victorville. Colorado Desert Overview covers from the Mexican border to Joshua Tree National Monument to Banning to the Arizona side of the Colorado. \$3.00 each. Be certain to state which map (or both) when ordering.

ARIZONA



ARIZONA by David Muench. The finest pictorial presentation of the Grand Canyon State ever published. One of the outstanding color photographers of the world, Muench has selected 160 of his 4-color photographs which are augmented by comprehensive text of David Toll. Hardcover, 11x14 format, 200 heavy slick pages. \$25.00.

Send check or money order to
Desert Magazine Book Shop
P.O. Box 1318
Palm Desert, California 92260
Calif. residents add 5% sales tax.

Change in Policy - All Orders Shipped POSTPAID

TREASURE
HUNTERS-
PROSPECTORS
**FREE
CATALOG!**

Metal-Mineral Detectors
Whites—Metrotech—Goldak—
Fisher—Excelsior—Precision

DREDGES
DRY WASHERS
MAPS
SLUICE BOXES
ROCK TUMBLERS
TOOLS
ASSAY KIT
OTHER
RELATED EQUIPMENT

AURORA

6286 BEACH BLVD.
BUENA PARK, CALIFORNIA 90620
Phone (714) 521-6321



THE SPARKLE
TUMBLER!

HOLDS 3 LBS. OF GEM MATERIAL
FOR ONLY \$11.⁹⁵
PLUS POSTAGE

**GORDON'S ALL-NEW
1971-72 CATALOG**

IS NOW AVAILABLE. OVER 250 PAGES
OF MOUNTINGS, TOOLS AND SUPPLIES.

A MUST FOR NEW ROCKHOUNDS

\$1.00, REFUNDABLE

WITH ANY \$7.50 ORDER.

FREE! FREE!

For DESERT Magazine Readers
GORDON'S GEM SHOPPER

GORDON'S

1741 CHERRY AVE
LONG BEACH, CALIF. 90804
P.O. BOX 4073D

Rambling on Rocks

by
Glenn
and
Martha Vargas

DESERT PAVEMENT

A COMMON FEATURE of our desert landscape is various sized mountains standing in flat areas. The geology student is very surprised at his first view of the desert; there are no foothills at the base of the mountains. The flats suddenly give way to the mountains.

These flats take on a variety of forms; some are typically slightly dish-shaped valleys, perhaps a dry lake, others may be slightly rolling, some cut and grooved by washes, and some as flat as a parking lot. The last is often given the name of desert pavement, and most of them certainly have a resemblance. A close look shows a pebbly surface made of rounded stones about one inch in diameter and smaller.

Surprisingly, all of them are usually of the same dark brown color. One is forced to think that at sometime in the past, huge roadbuilding equipment had come in and installed a miniature cobblestone pavement.

If we stoop to pick up some of the stones, we get two surprises. First, we find that the individual pebbles are somewhat locked in place, and we must work to get one loose. Second, when it is picked up, we find that the portion that was buried is much lighter in color than the exposed portion. If we pick up a number of them, we may find that they are different types of rock, and the undersides may vary. How is this unique pavement formed? It is the result of two entirely unrelated actions working independently.

The level area was formed by the action of wind on sand and gravel that was washed in from the mountains. These pebbles lying highest above the surface received the greatest force of the wind. The action is interesting. When wind strikes a protruding body, it tends to be forced to the sides and downward, rather than upward. Some of the wind does go upward, but the greatest deflection is sideways.

During this deflection, the air is compressed into a smaller space, and its velocity is increased. With the aid of increased velocity, the wind can now move grains of sand easier than before. Some of the sand to the front, sides, and beneath the pebble is blown away, finally allowing the pebble to settle slightly. The sand is removed completely, to be deposited elsewhere as a dune. This is continued until the pebble rests with its upper surface at the same level as those surrounding it.

During this settling, some will come to lie at least partially on some of their neighbors, and others will lie on them, more or less locking the group together.

The dark coating on the pebbles, known as desert varnish, has intrigued desert students and travelers from the beginning. Many explanations have been offered, ranging from a pollen coating, to just plain sunburn. Careful study by geologists showed it to be a coating of a mixture of minerals, mostly iron oxide and manganese oxide. The iron oxide is red, the mineral hematite. The manganese oxide is black, either of two minerals, pyrolusite or psilomelane (pronounced sill-AH-mel-ane). The final color is the result of the concentration of each. Desert varnish is usually brown, but at times it is nearly jet black.

These two minerals are usually represented in most rocks. As the flat area

BREAKFAST
ANYTIME!
OPEN 7 DAYS
24 HOURS
A DAY



206 South Main

Sportsman's Cafe
LONE PINE, CALIFORNIA

formed originally, rocks were pulverized with all ingredients carried into the valley. Both minerals are also slightly soluble in water.

Rain is infrequent on the desert, but when it comes, it is usually in copious amounts. The water is quickly absorbed, and there it will dissolve small amounts of the oxides. After the rain is over, the water now moves back up to the surface, and carries with it the minerals in solution.

Water moving up through the soil does not completely bypass the rocks within or upon it; it actually soaks through them! Granted, it does not soak through very fast, nor in large amounts. Most rocks are at least slightly porous, and capillary attraction sends it through. We will grant also, that some of the water traveled up through the sand, but this does not alter the final result.

Finally, after a period of time, depending upon the porosity of the rock, the water will reach the outer surface and evaporate. At this time the dissolved minerals are left behind as a coating. The water that moved up through the sand usually comes out to air on the lower surface of larger pieces, and adds to the coating of that which came through the rock. Thus, most rocks that are covered with desert varnish have a slightly thicker layer at the lower edge of the coating, at the ground level.

There may be other minerals that are deposited in the varnish layer. If they are light colored, they may have a small effect on the final color. However, most other minerals are more easily soluble than the iron and manganese oxides, and thus are apt to be washed away by subsequent rains, leaving the lesser soluble ones remaining.

The formation of desert varnish is not reserved for desert flats, but take place anywhere in the desert that rain falls,

and soluble minerals lie beneath the surface. Also, desert varnish does not coat only small pebbles, but any size up to extreme large boulders.

Large boulders, covered with desert varnish, are not really part of the story here, but it was these that became the "drawing board" of the prehistoric desert dweller. All he needed was to take a sharp stone and chip away this relatively thin soft layer and he was able to execute petroglyphs depicting part of his culture. The name is from the Greek, *petros*-rock, and *glyph*- to write.

Prehistoric peoples also took advantage of the varnish coating on the desert pavement for some of their art work. These took the form of what we call pictographs, the word again from the Greek; *picto*-picture and *graph*-to write. There are some fine examples of pictographs near the desert city of Blythe, California. Huge figures of people, and animals such as horses, snakes and others, as well as designs were made by scraping away the varnished stones. They created a light colored figure, accented by a small ridge of varnished pieces along the edges, much as a present day artist would use a pencil to outline a figure.

How long does it take to form a varnish layer? Obviously, a thin layer will form sooner than a thick one, but in any case, the best estimates we have are better than a thousand years. Thus, prehistoric man's art work can be considered very permanent.

Today, many people visit the desert and there is great temptation to travel over desert pavement. The passage of a vehicle does not go unmarked. Some of the pebbles are turned over, revealing their lighter undersides, and some of them are pushed out of their resting place. Now the wind has work to do as it passes, and the aftermath of rain can "brush" on its layer of varnish.

Make Your Outings More Fun

Find Old Coins Treasures

and Profitable Too!



METAL DETECTORS

- Detectron
- Excelsior

Get the Best Top Guarantee Easy to Operate

From \$39.95 to \$165.00

Stop By And See Our

Ultraviolet Lights, Jewelry Findings and Supplies, Lapidary Equipment, Tumblers, Gold Pans, Books on Treasures and Lost Mines, Wax Patterns, Casting Supplies..

COMPTON ROCK SHOP

1405 South Long Beach Blvd.

Ph. 632-9096 Compton, Calif. 90221

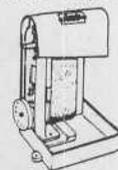


21 Years Before The First Professional Baseball Game Was Played,

Covington was manufacturing hand and foot-powered grinders for gem coral and sea shells.

FREE CATALOG

of over 200 modern gem machines & equipment. (Mail coupon below)



COVINGTON ENGINEERING CORP.

Box 35-D, Redlands, Calif. 92373
Mail me the FREE catalog postpaid.
(Please print name and address)

Name _____
Address _____
City _____
State _____ Zip _____

RIVERSIDE COUNTY'S LARGEST 4-WHEEL-DRIVE HEADQUARTERS

Accessories for All Makes

Jeep
JOHNSON'S
SALES and SERVICE

1st and Market, Riverside, California
Telephone 714 684-9020

CREATE JEWELRY!

FOR GIFTS, PERSONAL WEAR OR PROFIT!

FREE! 200 PAGE CATALOG SHOWS HOW!

EASY TO DO, NO SPECIAL SKILLS

Earn Big Money in your spare time. Sell your creations for 2 to 5 times what you paid for them. This FREE CATALOG contains everything you need . . . send for hobby-crafts biggest and best catalog. Contains over 10,000 items . . . loaded with pictures - everything you need to get started at once.



SEND FOR FREE CATALOG

GRIEGER'S Inc. Dept. 11, 1633 E. Walnut St. Pasadena, California 91109

The Trading Post Classified Ads

HOW TO PLACE YOUR AD

★ Mail your copy and first-insertion remittance to: Trading Post, Desert Magazine, Palm Desert, California 92260. Classified rates are 25c per word, \$5 minimum per insertion.

DEADLINE FOR CLASSIFIED ADS IS 10TH OF SECOND MONTH PRECEDING COVER DATE.

• AUTO ACCESSORIES

POLLUTION DOWN - PERFORMANCE UP. California accredited exhaust smog device with built-in electronic ignition system. Cooler running, better gas mileage. Soon pays for itself. Pure-Power \$64.95. Enjoyment and safety with a dual battery system. Automatic charging, no switching, relays. Power-Saver \$14.95. Both from Eco Products, Box 6121-DM, Orange, California 92667.

• BOOKS - MAGAZINES

OUT-OF-PRINT books at lowest prices! You name it—we find it! Western Americana, desert and Indian books a specialty. Send us your wants. No obligation. International Bookfinders, Box 1, Pacific Palisades, Calif. 90272.

"GEMS & MINERALS," the monthly guide to gems, minerals, and rock hobby fun. \$4.50 year. Sample 25c. Gems & Minerals, Mentone, Calif. 92359.

"OVERLOOKED FORTUNES" in minerals and gem stones; here are a few of the 300 or more you may be overlooking: uranium, vanadium, tin, tungsten, columbium, tantalum, nickel, cobalt, gold, silver, platinum, iridium, beryllium, emeralds, etc. Some worth \$1 to \$2 a pound, others \$25 to \$200 per ounce; an emerald the size of your thumb may be worth \$1000 or more; learn how to find, identify and cash in on them. New simple system. Send for free copy "Overlooked Fortunes in Minerals," it may lead to knowledge which may make you rich! Duke's Research Laboratory, Box 666-B, Truth or Consequences New Mexico 87901.

LOST DESERT GOLD, legendary and geological history of the southern California desert, with photos and maps to pinpoint locations. \$2.50 postpaid. Gedco Publishing Co., Box 67, Bellflower, Calif. 90706.

SURVIVAL BOOKS! Guerrilla Warfare, Wilderness Living, Medical, Guns, Self Defense, Nature. Books—Vital, Fascinating, Extraordinary; Catalog free. Adobe Hacienda, Route 3, Box 517A, Glendale, Arizona 85301.

"DEAD MEN DO Tell Tales" By Lake Erie Schaefer. Facts about Frank Fish's mysterious death, still unexplained. Sequel to "Buried Treasure & Lost Mines" the Treasure Hunters manual. \$3 postpaid. L. Erie Schaefer, 14728 Peyton Drive, Chino, Calif. 91710.

RIVER OF GOLD, the richest treasure of them all. A new book "Treasure Travels" contains all new photos, maps and other valuable information on California's most fabulous treasure. \$3 postpaid. Gedco Publishing Co., Box 67, Bellflower, Calif. 90706.

FREE 128 page catalog on detectors, books and maps. General Electronic Detection Co., 16238 Lakewood Blvd., Bellflower, Calif. 90706.

BACK ISSUES DESERT — 30s to 70s. Requests answered same day. Send us your want lists and we will quote prices. Everybody's Bookshop, 317 West 6th Street, Los Angeles, Calif. 90014.

"ENCHANTING ENCOUNTERS With Birds" — a new truly enjoyable, clothbound book of delightful personal experiences with hummingbirds, robins, nightingales, etc. Splendid photographs; 50 pages text. Satisfaction assured. \$3.75 postpaid. Fitting gift for any bird lover! Birdlover, 16759 Otsego, Encino, CA 91316.

• BOOKS - MAGAZINES

WILD & WOOLLY West Books. Send Stamp for illustrated catalog of 25 books on Indians, Railroads, Ghost Towns. Sample book and catalog \$1.00. Filter Press, Box D, Palmer Lake, Colorado 80133.

GUIDE TO MEXICO'S gems and minerals: localities, mines, maps, directions, contacts. English-Spanish glossary, too. \$2.00 postpaid. Gemac, Mentone, Calif. 92359.

FREE WESTERN BOOKS CATALOG! Over 450 popular and rare (cloth and paper) editions. For a complete catalog of authentic Old West books & maps write: Western Americana Books, 226 Spring Creek Road, Route 2, Parker, Colorado 80134.

DESERT MAGAZINES, Complete set in binders. Volume 1, number 1, to Volume 35, number 12. Best offer over \$300.00, plus transportation. Hollis Gordon, 411 E. Kansas St., Independence, Mo. 64050.

FOR SALE. Desert Magazines complete, from November 1937 to June 1972. Many in handsome cases and others in binders. H. Janetzy, Box 3310, Sedona, Ariz.

• EQUIPMENT

PRECISION LAPIDARY Abrasive Compounds for tumbling, polishing and grinding. Send for free catalogue and price list. MDC Industries, 400 West Glenwood Avenue, Philadelphia, PA. 19140. Dealer inquiries invited.

• GEMS

SHAMROCK ROCK SHOP, 593 West La Cadena Drive, Riverside, California 92501. Parallel to Riverside Freeway. Phone 686-3956. Come in and browse; jewelry mountings, chains, supplies, minerals, slabs, rough material, equipment, black lights, metal detectors, maps, rock and bottle books.

GEM SHOP WEST. Mineral specimens, custom jewelry, gem identification, slabbing. 72-042 Highway 111, Rancho Mirage, Calif. 92270. Phone 346-2812.

FOR SALE due to death, huge rock collection, Jasper, geodes, etc., trim saw, tumbler, \$500.00 cash only. Kathryn Fischer, Fischer Road, Box 111, Anza, CA 92306.

• HEALTH

BACK PAIN STIFFNESS, get immediate relief. Now easy illustrated booklet, copyrighted 1972. Send \$3.00 to: Self Alignment, Box 336, Corona del Mar, Calif. 92625.

• INDIAN GOODS

ARROWHEAD'S WEST. Tools and Relics of Stone-age Man. Arrowheads, Artifacts, Birdpoints, Gamepoints, Darts. \$1.00 each; 3/\$2.00 or 12/\$6.00. Send for our list of available material to: Arrowhead's West, P.O. Drawer 80, Barstow, CA. 92311.

INDIAN CALENDAR 1973—Large, colorful decorative panel. \$1.50. Eagle Dancer in color for framing—White Burlap, \$5.00. Indian Dancer prints, 4-\$3.00. America Is Indian Country T-Shirt, \$2.50. H&E Enterprises, P.O. Box 224(D), Dundee, Illinois 60118.

APACHE ARROWHEAD Collections—Perfect, Jasper, agate, flint, 25-\$5.00, 100-\$15.00. Dealers inquiries invited. Geronimo, DD1239, Apache Junction, Arizona 85220.

• INDIAN GOODS

FINE RESERVATION-MADE Navajo, Zuni, Hopi jewelry and Kachina dolls, Navajo rugs, Yei blankets, Chimayo blankets and vests, pottery. Nambé cooking and serving ware and unique gifts. A collector's paradise. Open every day from 10:00 to 5:30. Buffalo Trading Post, 20115 Highway 18, Apple Valley, Calif. 92307.

• JEWELRY

CUSTOM-MADE JEWELRY at prices you can afford. Full information sent on request—rings, pendants, pins, cuff links, etc., mail order only. Freda M. Francisco, 11335 E. Lambert, El Monte, Calif. 91732.

• MAPS

HISTORICAL MAPS! "Pioneer Trails", 1541 to 1867. From Coronado to the Pony-Express, with trails in red. Most of U.S. and Upper Mexico. 37" by 45". Folded, \$4.00, Rolled, \$4.25. "Lost Mines and Buried Treasures of California", 127 stories. Folded, \$4.00. Rolled, \$4.25. "Pioneer - Towns, Ghost - Towns and Mining-Camps of California". 433 places. Folded, \$2.95. Rolled, \$3.20. "The Oregon Trail". Pictorial. Blue or black. Rolled only, \$1.50. "Land of the Ancient Scrolls and Tablets". Israel and the Far east nations. 8 colors. Rolled only. \$4.25. Sales tax 5%. Varna Enterprises, P.O. Box 2216, Dept. A, Van Nuys, Calif. 91404.

GHOST TOWNS OF NEVADA. Over 175 locations, towns, mines, mill sites, history and dates. Large folded map, only \$1.50 to Ervin Stubbs, P.O. Box 12865, E. Las Vegas, Nevada 89112.

OLD MAP KIT. Reprints of State and Railroad maps, 70-90 years old. Send self-addressed, stamped envelope for details. Specify state. Northern Map Co., 2046 N. Tripp Ave., Dept. DM, Chicago, Illinois 60639.

• MINING

ASSAYS. COMPLETE, accurate, guaranteed. Highest quality spectrographic. Only \$5.00 per sample. Reed Engineering, 522 W. First St., Rialto, Calif. 92376.

WILL BUY MINING CLAIMS (Patented) Desert acreage SW Arizona. Send Map, details. A. B. Clinton, Woodland Road, Ext. Portland, Conn. 06480

• OLD COINS, STAMPS

CHOICE UNCIRCULATED SILVER DOLLARS: 1880-81 S Mint; 1883-4-5; 1898-99-1900-01-02-04 O Mint, \$4.50 each. The lot \$50.00. Illustrated catalogue 50c. Shultz, Salt Lake City, Utah 84110.

• REAL ESTATE

40 ACRES \$250.00 PER ACRE. Develop your own poultry ranch or retirement home in smog-free and people-free high desert. Interest in new well, good roads, surveyed, 5,000 ft. elevation, East San Bernardino County, \$200 down, low monthly payments. Also 1100 acres for larger investors. Owner, E. R. Lewis, 5328 Park Lane, San Bernardino, Calif. 714-882-2146. Map mailed on request.

● REAL ESTATE

SOUTHERN UTAH. Invest now in Color-Country paradise, Bloomington Country Club lots, Kolob lots, ranches, farms, commercial, mobile home lots. Frank Pierce, Realty. Licensed Broker Utah and California. P.O. Box 12, St. George, Utah 84770, 310 East Tabernacle St., (801) 673-5000.

GOVERNMENT LANDS—Low as \$1.25 Acre! Buy, Lease or Homestead. . . Free Details! Lands Digest, Box 1555-DM, Tacoma, Wash. 98401.

GOVERNMENT LANDS . . . low as \$1.00 acre! Million acres! For exclusive "Government Land Buyer's Guide" plus "Land Opportunity Review" listing lands available throughout U.S., send \$1.00. Satisfaction guaranteed. United Lands, Box 19107-RB, Washington, D.C. 20036.

IDEAL 5-ACRE RANCH. Lake Conchas, New Mexico. \$2,975. No. Down. No Interest. \$25 Monthly. Vacation Paradise. Camp, Explore. Money Maker. Free Brochure. Ranchos: Box 2003DP, Alameda, CA 94501.

● TRAVEL

MEXICO CARAVANS open to all recreation vehicles. Free brochure. Point South Caravan Tours, 5309 Garden Grove Ave., Tarzana, CA 91356.

4WD-"JEEP" Scenic Adventure Trips, Death Valley region, all desert areas, Paul H. Thompson Enterprises, Box 20, Darwin, Calif. 93522.

4WD "JEEP" Scenic Adventure Trips, Death Valley region, all desert areas, Paul H. Thompson Enterprises, Box 21, Darwin, Calif. 93522

● TREASURE FINDERS

FREE—VALUABLE TREASURE FINDER catalog sent by return mail. Find coins, rings, gold, silver, metals, relics. Write today. Jetco, Dept. CD, Box 26669, El Paso, Texas 79926.

FISHER DETECTORS. You deserve the best! Free literature, FRL, Dept. D-2, P. O. Box 490, Belmont, Calif. 94002.

TREASURE-METAL and mineral locators. Free 24 page booklet. GeoFinder Co., Box 37, Lakewood, Calif. 90714.

GOLDAK Treasure Locators—Pleasure and profit in a hobby you'll enjoy. Find coins, relics, gold, silver. Charge on BankAmericard. Goldak, Dept. DM, 1101-A Airway, Glendale, California 91201.

POWERFUL METROTECH locators detect gold, silver, coins, relics. Moneyback guarantee. Terms free information. Underground Explorations, Dept. 3A, Box 793, Menlo Park, Calif. 94025.

FREE 128 page catalog on detectors, books and maps. General Electronic Detection Co., 16238 Lakewood Blvd., Bellflower, Calif 90706.

METAL LOCATORS: White's, Goldak, Detectron, Metrotech, Precision, Excelsior, Fisher. Free catalog. Aurora Prospector Supply, 6286 Beach Blvd., Buena Park, Calif. 90620 (714) 521-6321.

FIND BURIED TREASURE with revolutionary patented, analytical metal detector. Features push button and automatic tuning, negligible ground pickup, greatest range. Free catalogue. Gardiner Electronics Co., Dept. 51, 4729 N. 7th Ave., Phoenix, Arizona 85013.

WILL YOU GAMBLE \$4.00 to save \$200?. Build one of several detectors from our 20-page book "Build Transistor Treasure Detectors." Easily followed instructions. \$4.00. Trionics, Box 164D, Brewer, Maine 04412.

GOLDAK TREASURE LOCATOR No. 720. Used, but near new. \$100.00. Private party. 6002 Varna, Van Nuys, CA. 91401 (203) 786-1104

● MISCELLANEOUS

OIL PAINTING, knife, brush. For beginners or advanced. Free brochure. Degrees granted. Roy Keister College, 19 Washington St., Santa Clara, Calif. 95050. B.

AUDUBON SUMMER INSTITUTE: Field Studies in Co., Box 2031, San Bernardino, CA 92406. Desert Ecology. August 4-12. Field trips and air-conditioned ranch setting. Write Tucson indoor sessions alternating with relaxation in Audubon Society, 2504 E. Lee, Tucson, Ariz. 85716.

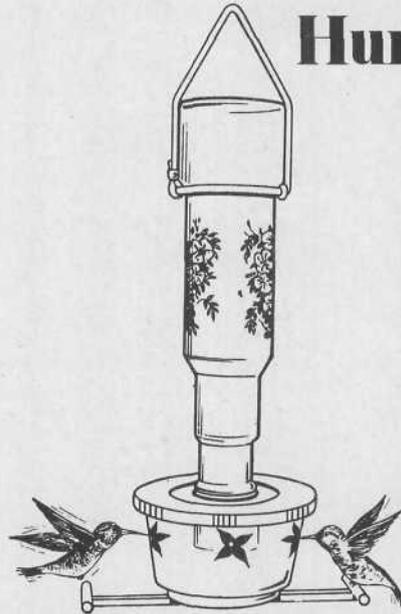
● MISCELLANEOUS

VALENTINE GIFTS of Love. Rings, Pendants, Diamond replicas and genuine stones. Lifetime Guarantee. Discounted 33 1/3 %. Free catalogue. Write Kingswood House, Box 1069D, Fort Worth, Texas 76101.

GUMMED NAME AND address labels: 1000—\$1, 3000—\$2.25. Two week delivery. C. Friday, 4705 Adam Road, Santa Susana, Calif. 93063.

For the Birds?

Hummingbird Feeder



- DRIPLESS
- BEE PROOF
- ANT PROOF
- NOTHING TO RUST

ONLY **295** Postpaid

Send check or money order to:

Desert MAGAZINE

Palm Desert, California 92260

California residents add 15c tax

Desert SUBSCRIPTION FORM

2-73

PALM DESERT, CALIFORNIA 92260

ENTER A NEW SUBSCRIPTION

RENEW MY PRESENT SUBSCRIPTION

NAME _____

ADDRESS _____ ZIP CODE _____

SEND GIFT SUBSCRIPTION TO:

NAME _____

ADDRESS _____

NAME _____

ADDRESS _____

Sign Gift Card: "From _____
 One Year \$5.00 Two Years \$9.50 Three Years \$13.00
 (Or 2 One Years) (Or Three One Years)

PAYMENT ENCLOSED BILL ME LATER

ALSO SEND DESERT'S 12-ISSUE HANDSOME BROWN VINYL BINDER FOR \$3.50
 (includes tax and postage)

Date Binder(s) with Year(s) _____ Undated

Letters to the Editor



Salute to Trona . . .

While on a recent rock hunting trip to the Death Valley area, a buddy and I came across another case of vandalism. The saving grace of this whole episode was the beautiful restoration efforts of the local people.

We noticed the marker at Searles Lake was badly burned. The next day we stopped at the marker when we saw several cars there. Bud and Grace Swang and Fred and Lorraine Schutte of the VFW Post 1950 at Trona informed us the vandals evidently used a magnesium flare to try and destroy the marker.

The two couples had sand blasted and then lacquered the marker and did a beautiful job of restoration. They told us the bronze plaque of the Ballarat marker had been stolen three times.

On the same day they were restoring the marker, the people from Trona, including Boy and Girl Scouts and service organizations, using sacks donated by the Stauffer Chemical Company, picked up litter for six miles along Highway 178.

I thought your readers would like to know that there are dedicated people who love the desert and clean up after vandals who evidently only get their kicks out of life by destruction.

LARRY LANE

Westminster, California

Expert's Opinion . . .

Editor's Note: This informative letter from the Curator of Mammals, National Zoological Park, Washington, D.C., is in response to the article on coyotes in the March '72 issue by Naturalist K. L. Boynton and Boynton's reply to a letter from a rancher printed in the November '72 issue.

Dear Mr. Boynton,

My wife and I have read your articles on desert fauna with a great deal of interest. Most of our lives were spent in various localities of Nevada and Utah where one of my main areas of research for many years was the ecology of carnivores, especially the kit fox and the coyote.

I grew up in the sheep industry so know that sheepmen never look at coyotes as assets. Most sheep owners I talked to in Utah even thought kit foxes killed sheep. Anyway, the letter exchange between you and Mr. Thomas in the November issue of *Desert* prompted this response.

One aspect of the subject that Mr. Thomas failed to consider was the fairly high post weaning age mortality rate for coyote pups. Indeed, this is true for many carnivores. Many laymen

just assume that predators automatically are born with some special guarantee that, if left alone, they will all live to a ripe old age.

Also, that the factors that regulate populations in other forms of life, such as special requirements (territorially), food supply, climatic extremes, seem not to apply to bears, foxes, bobcats, coyotes, eagles, etc. To what extent territorialism exists in coyotes is not clear. Undisturbed populations outside the National Parks are difficult to find, but even in Yellowstone coyote numbers are regulated by food supply and declines have occurred in the face of food shortages created by severe winter conditions.

The kit fox populations I studied in western Utah were very stable for about 12 years and during that time not a single pup born on my study area ever became part of the adult population. Then in the latter 1960s we experienced one of those crash declines in jack rabbits that occur periodically.

The year following the kit fox production began to decline when some females failed to breed. The next year there were fewer adults and the litter size was smaller than average. If there was ever any question in my mind that kit fox economy was dependent on black-tailed jack rabbits, it disappeared then.

Other sources of food such as mice and birds just could not make up the difference. When things began to return to normal the familiar sequence of events took place. First, the rabbit numbers recovered and then the foxes. But the most interesting fact I discovered was that it was only when foxes were at their lowest numbers and there were numerous vacancies in the study area were any of the replacements drawn from foxes born in the area.

The other fact established early in my study was that only a given number of resident foxes lived on the area regardless of how plentiful the rabbits were. A pup of the year had no chance of carving itself out a piece of the territory. There was no question that each pair of breeding adults had its own area from which other breeding pairs were excluded. Transients moved through but did not stay unless there was a vacancy. How much of this might apply to coyotes I am not prepared to say. Territories for them may not be firmly established except during puppy season.

But the evidence no longer supports the idea that carnivores should be exterminated.

I recently returned to the scenes of my boyhood in eastern Oregon and northern Nevada where the sheep industry was an important part of the economy for many years. No telling how many hundreds of thousands of dollars and years of efforts by a succession of predator control people, professional trappers and others had been directed towards the extermination of coyotes between 1920 and 1970.

But I was able to hear coyotes yelping every night and early morning I spent there in exactly the same areas I heard them in 1934. Sheep business has now declined there in favor of cattle and cattlemen are more favorably disposed toward coyotes.

So, long may the coyote wail over the desert valleys in Oregon and Nevada and everywhere else in our land.

HAROLD J. EGOSCUE

Calendar of Western Events

JANUARY 27 through FEBRUARY 4, 14TH ANNUAL FESTIVAL OF ARTS, Tubac, Arizona. Sponsored by the Santa Cruz Art Association, this is an outstanding Western art show with oils, water colors, wood carvings, fabrics, ceramics, jewelry, batiks, etc. Write Mrs. H. T. Wheless, P.O. Box 1332, Tubac AZ 85640.

JANUARY THROUGH JUNE 1, PALM SPRINGS AERIAL TRAMWAY open for Winter Season seven days a week, 10 A. M. to 7:30 P. M. See guide in this issue for additional information.

FEBRUARY 9-11, TUCSON GEM & MINERAL SOCIETY'S 19th annual show, Tucson Community Center. Collections and lecturers from the world's top museums. Large display of rough and cut diamonds. One of the best gem shows in the world. Write P. O. Box 6363, Tucson, AZ.

FEBRUARY 9 - 11, SECOND ANNUAL NORRA DAM 500, Parker, Arizona. Off-road vehicle competition. For details write NORRA, 1616 Victory Blvd., Suite 200, Glendale, CA. 91201.

FEBRUARY 6 - APRIL 17, LIVING DESERT RESERVE. Palm Desert, California. Lectures on desert natural history every Tuesday evening at 7:30 P. M. The Living Desert Reserve is open all week, except Mondays, from 9 A. M. to 5 P. M.

FEBRUARY 17 & 18, 5th ANNUAL SAN FERNANDO VALLEY GEM FAIR, Devonshire Downs, 18000 Devonshire Blvd., Northridge, Calif. Write P. O. Box 286, Reseda, CA. 91335.

FEBRUARY 17-19, WESTERN WORLD OF GEMS sponsored by the Scottsdale Gem & Mineral Club, Mall Fashion Square, Scottsdale, Arizona. Free parking and admission. Write Eleanor Morrison, 4753 North 33rd Place, Scottsdale, AZ. 85018.

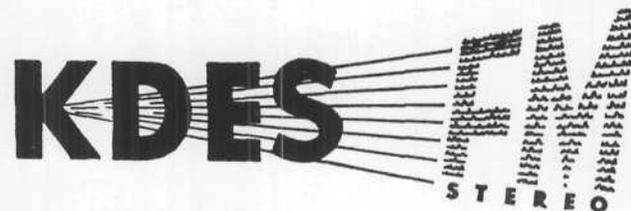
MARCH 2-4, WONDERFUL WORLD OF LAPIDARY sponsored by the Maricopa Lapidary Society, Inc., State Fairgrounds, Phoenix, Ariz. Overnight camper parking. Field trip. Write 10637 Crosby Dr., Sun City, AZ. 85351.

MARCH 2-11, IMPERIAL VALLEY GEM & MINERAL SOCIETY'S 26th annual show, California Mid-Winter Fairgrounds, Imperial, Calif. Field trips to Mexico. Write Ken Skillman, 707 C Street, Brawley, CA. 92227.

MARCH 3 & 4, VENTURA GEM & MINERAL SOCIETY'S 11th annual show, Ventura County Fairgrounds, Ventura, Calif. Write Ed Turner, P. O. Box 405, Santa Paula, CA. 93060.

Two Great Radio Stations in The Desert Empire

kdes
RADIO **92**

KDES 
STEREO

RADIO 105

FEATURING:

- ★ ALL HIT MUSIC
- ★ UP-TO-THE-MINUTE
LOCAL AND NATIONAL NEWS
- ★ 5000 WATTS
920 Khz. AM

FEATURING:

- ★ CONTINUOUS MUSIC FOR
EASY LISTENING
- ★ FULL-FIDELITY STEREO
- ★ 20,000 WATTS
104.7 Mhz. FM

No.1 in the Desert!

ON-THE-AIR **24** HOURS A DAY

821 North Palm Canyon Drive
Palm Springs, California

Tourtlot Broadcasting Company

Follow your dream in a **SILVER STREAK**



From the ground up, the new Silver Streak is a dream experience. This year Silver Streak offers wide-track undercarriage for amazing stability and roadability. Smoke-tinted safety glass, gold anodized aluminum front window awning and matching corner window covers produce a classic exterior. Six new plush interiors in Continental, Deluxe, and Sabre models. Dreams are what you make them. Silver Streak helps them come true. Write for free color literature and location of your authorized dealer.

Water-Gard purifier is standard equipment on all models.

SILVER STREAK Trailer Company

2319 N. Chico Ave., So. El Monte, Calif. 91733
Phone (213) 444-2646 283-6372

Register now for 1973 National Rally, San Diego, Calif., Sept. 9-15. Contact V. L. Cooper, rally coordinator, Silver Streak factory.